

1951 ANNUAL REPORT

Poweshiek County Soil Conservation District

Brooklyn, Iowa



The Commissioners of the Poweshiek County Soil Conservation District present a report of activities and progress in soil conservation for the year 1951 to farmers and all cooperating groups and others in county and state interested in saving soil, water and proper land use, and the outlook for 1952.

THE DISTRICT GOVERNING BODY

Elmer Dunnick, Montezuma, Iowa	Chairman
Howard Sears, Malcom, Iowa	Commissioner
J. Basil Brush, Brooklyn, Iowa	Commissioner

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The Poweshiek County Soil Conservation District brings to a close the 6th year of its program with results that have been gratifying to all who have been connected with this work.

Each year sees a greater increase in grass waterways, contouring, farm ponds, and other conserving practices. This year has been no exception in spite of the extremely wet season which hindered installation of tiling, earth moving work, good planning—in fact everything connected with farming. We are hoping 1952 will give us a better break in this respect!

This past year saw the merger of the agencies of the County for an overall program known as the Poweshiek County Agricultural Resources Conservation Committee of which our department plays an important part.

Our District has on its staff Morton James, Farm Planner; Archie Casebolt, Conservation Aid; and Raymond DePauw, State Conservation Aid. Mr. Lyall Mitchell of Oskaloosa is District Conservationist. Serving as commissioners are Elmer Dunnick, Howard Sears, and Basil Brush. Loren Brown, County Extension Director, has served very efficiently as secretary and educational aid. Financial aid given by the State of Iowa has been very much appreciated.

In view of the work situation, our entire group looks forward to helping produce more and better crops through conservation in the coming year.

EDUCATIONAL ACTIVITIES

The necessity of soil conservation is being recognized more and more each year by Poweshiek County farmers. In the early years of soil conservation work progress appeared to be very slow; but as with many other educational programs, it gained momentum as time went on. The results of soil conservation activities may now be noticed throughout the county. Since the organization of the Poweshiek County Soil District in 1945, the Extension Service has been responsible for the educational work in cooperation with this group. The PMA, local schools, veteran's groups, and churches as well as local press have also had an important place in assisting with the work. There is still much to do but within the next ten years it is expected that a high percentage of farmers will be endeavoring to carry out a complete soil conservation plan on their farms.

A good soil management program is built around better rotations, more desirable varieties, better management practices, utilization of roughages and pastures, insect and weed control, proper use of commercial fertilizers, as well as soil erosion control.

The Extension program in cooperation with the district has been endeavoring to carry on a program along all of the above named activities. Assistance has been given the district in organizing new groups and during the past year, new ones were organized in Madison, Lincoln and Malcom townships.

A soil conservation banquet and election of one district commissioner was held in the Brooklyn High School February 28, 1951 with about 200 people in attendance. Basil Brush of Bear Creek Township was elected commissioner for a six-year term replacing

J. J. Boatman, who retired. The program was in charge of Elmer Dunnick, Chairman of the District Commissioners. Dr. George Browning, Associate Director of the Experiment Station at Iowa State College, was the principal speaker.

The principal feature of the banquet was the awarding of prizes for the poster contest sponsored by the District. Over 230 posters were entered in this contest. First prize was awarded to Barbara Butterfield, Jefferson No. 4; Second prize to James Kaplan, Jefferson No. 4; Third prize to Robert Ballard, Grant No. 3; Fourth prizes to John Renaud, Grinnell Center; Joel Prescott, Grinnell Center; Bonnie Jo Miller, Grinnell Center; Leota King, Grinnell Center; Kay Lynch, Sheridan No. 2; Don Haase and Don Brush, Brooklyn; Fifth place prizes went to Karen Cranston, Lincoln No. 3; Elizabeth Fowler, Grant No. 1; and Caroline Jame Walton, Jefferson No. 4; the prize for the best group of posters by one school was awarded to Jefferson No. 4 whose teacher is Mrs. Barbara Zmolek.

The demonstration contest held at the banquet between the F. F. A. groups in the county resulted in Montezuma winning first prize, Grinnell winning second prize, and Brooklyn third.

A soils tour sponsored by the Poweshiek County Soil District, the Soil Conservation Service, and the Extension Service was held August 17. Visits were made to the David Anthony farm in Sheridan Township to observe contouring, and strip cropping; to the Wayne Reams farm in Sheridan Township to observe diversion terracing, contouring, and strip cropping; to the Harley Reimers farm in Madison Township to observe a gully control structure and a farm pond; and to the Clifford Metz farm in Madison Township to observe a farm pond.

Two fertilizer demonstrations were established on corn ground by the Extension Service in 1951. On the Elwood Burlingame farm, four different commercial fertilizers, 5-20-10, 6-24-0, 0-20-0, and 33-0-0, were applied before plowing. Nitrogen was applied to a plot on the Charles Postma farm in Deep River Township. Because of the extremely wet spring, the Charles Postma plot did not show any results, however, on the Burlingame plot, the application of straight nitrogen at the rate of about 80 pounds to the acre, showed visual results during the entire season. Because of the variation of stands in this plot, it was not felt that a yield test would be valuable. Observation did show, however, that the application of plowed-under nitrogen was very beneficial especially on second-year corn.

Also, two soil report interpretation meetings were held by the Extension Service on January 31. One meeting was held in the afternoon at Brooklyn, and the other in the evening at Montezuma. At these meetings, farmers were assisted in the interpretation of return reports of soil samples sent to Iowa State College for analysis.

Although not directly associated with soil conservation work, a very successful forage handling field day was held by the Extension Service at the Bill Nagle farm near Grinnell August 9. Cooperation was secured of implement dealers in Grinnell and Poweshiek County furnishing equipment for handling of dry and green forage. Extension Service Specialists were present from Iowa State College and assisted with the demonstration and it was estimated that over 500 people were present at the meeting. There were 7 field choppers, 5 balers, 3 blowers, and a number of tractors, mowers, and side-deliverys furnished by the implement people.

FIELD OPERATIONS

PROGRESS IN DEVELOPMENT OF CONSERVATION PLANS

In 1951, 45 farmers were given technical assistance by the Soil Conservation Service in developing soil conservation farm plans, comprising a total of 7,471 acres. Since the District was organized in 1945, 306 farms have been planned amounting to 53,358 acres.

Interest in soil conservation has been good in 1951. Farm planning has just about kept pace with new applications. There are 71 applications for farm plans on file, and it has seemed best not to organize groups much farther ahead than that. Two groups were organized this year bringing the total on file to 31. Assistance has been given to 25 groups, leaving a total of 6 on the waiting list.

Consolidation of the activities of the Soil Conservation Service and the PMA under Secretary Brannan's Memorandum 1278 has retarded farm planning somewhat the latter part of 1951. The full effect of the consolidation will not be felt until 1952 when both supervision and certification of all permanent soil conservation practices becomes the responsibility of the Soil Conservation Service. If there is a reduction in the number of complete farm plans developed, perhaps technical help to a greater number of farmers will more than compensate for the loss.

Follow-up With Older Cooperators—Contact of Cooperators with older farm plans has continued this year. This help was made possible indirectly by extra assistance provided by State funds. The District is concerned about the continued progress of the older farm plans and desires to give assistance where needed.

During the year, 148 follow-up calls were made. Help given varied all the way from some minor changes in the cropping plan, to a complete over-hauling of the plan. In many cases, cooperators have applied practices which would not have been done without the follow-up contact.

Application of Conservation Practices

Weather—The year 1951 is one which many farmers will be glad to forget. Few will remember a year more difficult. Almost no farming operation could be done properly due to the almost constant inclement weather.

On most of the farms the soil never really became dry enough to plow, prepare, and plant crops. They had to be planted anyway. Wet soil and cool weather prevailed resulting in a shortage of available nitrogen for crops. The application of commercial nitrogen showed good response especially on soils of below average fertility.

Bad weather made harvesting of the first crop of hay an almost impossible task—at least by conventional methods. Much of the first crop was very poor in quality or was a complete loss. To get around this problem several farmers have started using the "shallow silage trench" or "hay pile" system.

At present the method seems very promising as a way of avoiding most of the weather hazards, especially in June.

Other merits of the methods include: high degree mechanization with low investment, low labor requirement, and the production of a highly nutritious forage.

Although rains were frequent no single storm could be considered as extremely destructive. Conservation practices stood up well, demonstrating their value. The acreage of contouring has increased over 1950. Diversion and terraces functioned well to the evident satisfaction of farmers constructing them.

The one bright spot in the weather picture was the favorable effect on new seedings. All legumes and grasses established good stands with the exception of sweet clover which was hurt by the weevil. Although the weather was favorable for late summer seedings, few took advantage of the situation in field seedings or in waterways. It was the first time in four years that summer seedings have been very practical.

Promising Crops—Birdsfoot trefoil, ladino clover, and alta fescue continue to have promise as crops for the county.

Two seed-increase plantings of birdsfoot trefoil were sponsored by the District, from seed furnished by the Soil Conservation Service Nursery at Ames. These seedings were made on the farms of A. L. Leyaens, Deep River, and Lawrence Wallis, Kellogg. Good stands were established in both cases.

Ladino clover is being used in pure seedings and in mixtures. Little difficulty seems to be experienced in getting stands.

Alta fescue is still more on a trial basis. Some seedings have been made in pastures, in waterways, and around ponds. Some seedings have been made in pastures, in waterways, and around ponds. Apparently it has its greatest usefulness on severely tramped portions of pasture and lanes, being somewhat harsh and unpalatable.

Multiflora Rose Plantings—Multiflora rose is a hardy, easily grown shrub, 6 to 8 feet high which is being used in various parts of the United States as a living fence and cover for wildlife. At present it is not known for certain how far north it is adapted. It is thought it is suited to at least the south half of Iowa.

Planting of multiflora rose has continued to expand. In 1948 with a start of a few thousand plants, the number has grown to 40,000 in 1950 and to over 62,000 in 1951. Most of the planting stock was obtained through the Iowa Conservation Commission. Unfortunately the weather in the spring of 1951 did not permit a good job of planting, and in a few cases part of the stock remained heeled in.

Established stands have made good growth and are beginning to turn livestock. In another year, several plantings will be serviceable fences. So far there is no indication of lack of winter hardiness. In addition to the above mentioned plantings, many have been secured from private nurseries.

Tree and Wildlife Plantings—Approximately 5000 evergreen trees were furnished by the Soil Conservation Service for planting in the District on cooperators farms. This program should be enlarged because there are numerous eroded areas which will produce greater returns in trees than any other crop.

Eighteen wildlife packets were distributed to district cooperators. The packets contain 50 to 75 plants including evergreens and two shrubs. They are intended for planting in odd areas to provide cover and food for wildlife. Most of the packets have been used around farm ponds.

Seed Production—The production of grass seed is down as compared with 1950. In the case of brome grass, the large crop and relatively low price discouraged saving brome for seed production. Also seed yields were down.

Weather and reduced yields has been the principal cause of small production with other grass seeds.

Grassed Waterways—Establishment of good grass waterways is the first and most essential step in installing conservation practices on a farm. Successful contouring, strip cropping, terracing, and diversions depend on adequate waterways to dispose of excess run-off.

There is a lot of interest in grass waterways and it is difficult to determine the extent of progress. The great majority of farmers recognize the need of waterways and make an effort to do something about ditches.

Spring shaping and seeding of waterways was hampered greatly by too much rain and a lack of time due to the weather. Ample rains would have made summer shaping and seeding feasible but shortable of time became an important factor.

Reed Canary is one of the best waterway grasses. However, the high cost of seed and uncertain seeding habits has limited its use. The disadvantages may in part be avoided by seeding small patches to supply sod. Sod pieces of Reed Canary grow readily and may be used to establish new waterways or repair old ones. One of the most successful methods of establishing a sod bank is to summer-fallow the area from early July until mid August, followed by the seeding of Canary grass.

Strip Cropping—Strip cropping in some form is being used on about half of the farms planned. The practices is better suited to the steeper, longer slopes and on farms having a rather high percentage of permanent pasture. In such cases the land in meadow is used for hay and presents no problem in rotation pasturing.

Terraces and Diversions—Fewer terraces and diversions were constructed in 1951 than usual. This was due primarily to lack of time among farmers caused by difficult weather. More diversions than terraces have been constructed. Some farmers object to working over terraces with farm machinery although all agree they are a very effective conservation practice. No objection has been raised to diversions even though they are not as effective as terraces. They are spaced farther apart and no intent is made to farm over them. Rains in 1951 demonstrated the worth of both practices.

Ponds—Nineteen ponds were stocked with bass and bluegills in August. Six new ponds were constructed which is a decrease as compared with 1950. The decrease was due partly to poor weather for construction, and to less interest. With high rainfall, there was no immediate need for additional livestock water supply as was the case in 1950.

Fish in a few old ponds apparently winter killed and were restocked. Fishing in ponds old enough for fishing was reasonably good.

Activities Made Possible By State Funds

From the funds made available by the State of Iowa, approximately 11 man months of technical and 1½ months of clerical help was hired. This enabled the District to facilitate conservation in the following ways.

1. Follow-up on old plans. This district has at present 306 farm plans, several of which were written in the fall of 1945. The addition of state help has relieved one of the Soil Conservation Service regular staff members, Archie Casebolt, permitting him to spend time checking these older plans. Help given varied from a few minor changes in cropping plan to a complete re-working of the farm plan. In 1950, Mr. Casebolt made 104 such contacts. In 1951 148 calls were made.
2. Help to groups organized but not planned. The District has on file 71 applications for farm plans. of these applications have been on file for over a year. It is the desire of the District to give these farmers help with simple soil conservation practices until assistance in developing a complete conservation plan can be given. The employment of a state aid has helped materially in making this possible.
3. In cooperation with the Iowa Conservation Commission, the District helped process papers and supervised planning of over 52,000 multiflora rose for living fences. This project was facilitated greatly by state assistance.
4. Beginning July 1, 1951, an additional technical responsibility was placed upon the Soil Conservation Service by Secretary Brannan's Memorandum No. 1278. Had it not been for the help of a state aid, there would have been a significant reduction in farm planning and in application of farm plans.

PROBLEMS AND OUTLOOK

The unusually wet and rainy season in 1951 handicapped many farming and conservation operations. The preparation of the soil, the planting, cultivation, and harvesting of crops were delayed with the result of a decrease in yield, especially of grain crops. In the case of conservation practices, it was very difficult to accomplish any earth moving until the fall season started and then this period was shortened by a two week rainy period. The net result was that much fewer farm ponds, terraces, and waterways were built than if it had been a normal year. It was even difficult to make much progress with tiling. There was much interest in this latter practice in view of the wet soil conditions. In view of the above, it is anticipated that interest will be good next year in applying the practices mentioned if a somewhat normal season is in effect.

The war activity and in turn the demand for continued high production of grain crops has a serious effect on the ability to maintain good rotations. This demand does help to serve the immediate needs, but on the other hand, it postponed the needed rotations and the best land use for various fields. A continual strain

on our land will eventually break it down beyond repair. In addition, the war activity is creating a shortage of materials such as nitrogen needed for fertilizers, and farm machinery still needed for replacement. The draft of man-power for the armed services is causing a shortage of farm help.

A decision was made, following a study of the matter, to change the method of farm planning and the scope of the district agreement form. Under this procedure, the district will enter into an agreement with a farmer which covers only one practice, but which points to the long time goal of a farm conservation plan. In other words, the farm can become a cooperator with the district and receive available assistance to perform the one or more practices. Later, as the opportunity and interest warrants, group meeting will be held and material which will include conservation surveys, land recommendation sheets, and job sheets will be supplied for the farmers study and use. The third step will be when the farmer is ready, the preparation of a farm conservation plan such as have prepared in the past. It is believed that through this procedure, farm planning may eventually be speeded up due to having more cooperators along the road to the final goal.

The issuance by USDA Secretary Brannan this past spring of two memorandums have affected district activities and operations in several ways. The first was Memorandum 1278 which outlined the formation of the Poweshiek County Agricultural Resources Conservation Committee and set forth its responsibilities and duties. Its membership includes representation of federal agricultural agencies and the district commissioners. In brief, the objective of this memorandum is to better coordinate the various agricultural resources which can contribute to the conservation activities. The committee has completed the preparation of a long time program and the objective is to use information and education, technical assistance, and payments in the most effective manner. The district and its assisting agencies has participated in the above and we believe that definite progress has been made toward the objectives of the Secretary's memorandum and which also is right in line with the goals of the District.

The second memorandum issued by the Secretary was No. 1280 which set up the County Agricultural Mobilization Committee. The purpose of this committee is to assist in providing information and to assist in the carrying out of the several action programs in connection with national defense. The membership of this committee is composed of various federal and state agricultural agencies and groups including district commissioners.

Naturally, the organization of and planning by the two committees set up under Memorandums No. 1278 and 1280 has required the time and attendance of the representatives of the various groups away from their own individual activities, but it is believed that these new activities will derive benefits in the long run.

State appropriations have again been used to a good advantage in 1951 by providing funds for several needed purposes. An allocation of \$500.00 per year is used for commissioner's expenses, some office expenses, for demonstrations and contests, and for other incidental items. The other division of allocations provides for technical assistance by which we have provided one additional technician to assist in district work. The sum of \$2500.00 was allocated in this fund for the fiscal year from July 1, 1951 to June 30, 1952. These state funds have a definite and worthwhile purpose and are very much appreciated.

