

1953

Annual Report

**Poweshiek County Soil Conservation District
Brooklyn, Iowa**



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The District Governing Body. J. Basil Brush,
Howard Sears, Lauren W. Wright.



THE DISTRICT STAFF

Seated, left to right: J. Basil Brush, Howard Sears, Lauren W. Wright. Standing: Raymond DePauw, Harlon Backhaus, Morton James, Archie Casebolt.

FOREWORD

The Poweshiek County Soil Conservation District at the completion of its eighth year of operation now has visible signs of applied conservation. The work is spread over a wide area and although every township does not have groups organized for conservation planning, evidence points to that situation becoming a realization within the near future.

Some of the impatience previously observed on the part of farmers waiting for assistance is abating, but the demand still is strong and an understanding of policies and procedures is better known.

As we attain results from educational and technical work, interest in conservation is being stimulated.

Our District has as its staff Morton James, Farm Planner; Archie Casebolt, Conservation Aid; Raymond DePauw, Conservation Aid; and Reatha Johnston, District Clerk. Harlon Backhaus of Marion is Area Conservationist. Howard Sears, Basil Brush, and Lauren Wright serve as commissioners on the District governing body. Stanley Stover, County Extension Director, has served very efficiently as secretary and has helped promote conservation education in the county.

Financial aid given by the State of Iowa and Agricultural Stabilization and Conservation Program is very much appreciated by the Commissioners. This financial assistance will be even more important in 1954 with prospects of reduced corn acreages, because as acreages are reduced more emphasis will be placed on use of mechanical conservation practices. Thus causing additional demand for assistance from the Soil District and its technicians.

DISTRICT AWARDS AND CONTESTS

Certificates for outstanding service to conservation in the county were awarded to Mr. J. J. Boatman, ex-commissioner, and Mr. Dave Sutherland, Sr. of the Montezuma Republican. Both are from Montezuma.

The District was pleased to have been chosen as winner in the Iowa Soil Conservation District Awards Program in Region Five. The contest was sponsored by the Iowa Association of Soil District Commissioners and the Iowa Group of Lee Newspapers and Radio Stations.

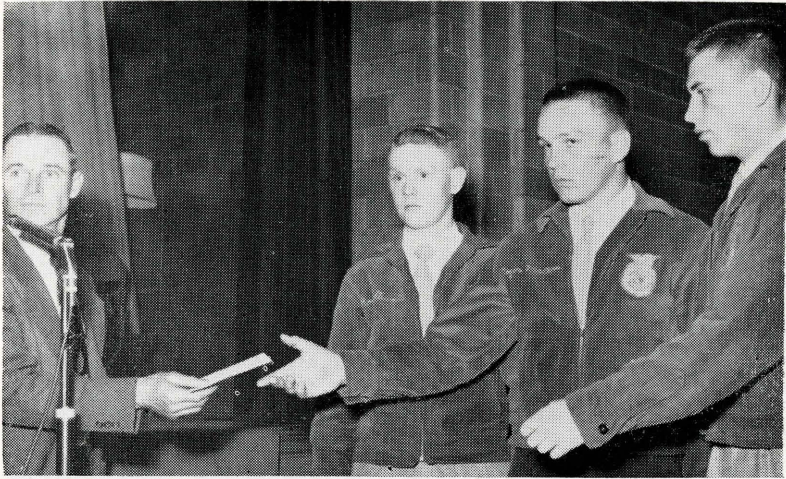
The Poweshiek District Commissioners take just pride in the fact that District Chairman Howard Sears was selected as Outstanding District Commissioner of Region Five in a contest sponsored by the Iowa Association of District Commissioners and the Des Moines Register and Tribune.



Montezuma Businessmen's Tour, August 24, 1953. Spectators standing on pond fill watching the "frog hunt."

EDUCATIONAL ACTIVITIES

Education in soil conservation has been the responsibility of the Extension Service. The Extension Service, working in direct contact with the Soil District, has assisted with the education of farm people through better rotations, pasture improvement, soil testing and fertilizer recommendations. Better rotations, farm plans, insect and weed control, and proper use of fertilizer has been on a steady increase in the county. Each new farmer who adopts a conservation practice serves as a demonstrator for his neighbors and the results have been that many practices are adopted without direct contact with the farmer.



Winners of the Soil Conservation Derby, Grinnell F.F.A. Left to right: Roger Stewart, Roger McClure, Jerry Fuller.

Due to an unusually dry season in 1953, fertilizer application did not prove as profitable as in normal years. From plots run during the 1953 growing season, plow-down and starter applications of fertilizer proved most profitable. Late season applications of nitrogen apparently failed to give the anticipated response because of the lack of moisture.

The biennial Soil District Banquet was held April 22 in the High School Gymnasium at Brooklyn. Lauren Wright, Montezuma, was elected to the District governing body, replacing Elmer Dunning, Deep River. In conjunction with the banquet a Soil Conservation Derby was held. All 4-H and FFA chapters were invited to participate. A set of study questions was made available to these groups and a list of answering references given to them. Nineteen teams of 4-H and FFA members entered the contest. A preliminary elimination contest was held with eight teams being allowed to go on and participate at the Conservation Banquet. These eight teams were the Grinnell FFA, Montezuma FFA, Pepper Uppers 4-H, Madison Go-Getters 4-H, Jefferson C.B.'s 4-H, Jackson South Pow 4-H, Pleasant Chick-A-Dees 4-H and Pleasant Go-Getters.

The derby was scored by a point system for each correct answer pertaining to soil and soil conservation. Final winners were the Grinnell FFA, 1st, and Bear Creek Pepper Uppers, 2nd—a girls' team.

Nine 5-acre corn yield contest plots were harvested in the fall of 1953. Varying degrees of results for the use of commercial fertilizer were found. John E. Roudabush, Brooklyn, with a yield of 127 bushels using no fertilizer was the winner. Good sound rotations and good land use are necessary items in high yields; commercial fertilizer should be used only as an aid.

Two abnormal conditions presented themselves during the year which greatly influenced farm people. Hail and an infestation of Pea Aphids and Clover Weevil on legumes. Pea aphids caused considerable damage in the south half of the county, completely de-

stroying several hundred acres of clover. Alfalfa did not suffer much from the bugs. DDT and Methoxychlor were used in combating the pests. In practically all cases DDT proved the better control. However, it could not be used on hay to be fed to dairy animals in production. In July a severe wind, rain, and hail storm effected a strip across the north-central part of the county. The strip ran from 1 to 3 miles in width and was most severe in Malcom township. An emergency meeting was called on the Leslie Douglas farm, Malcom, to discuss emergency crops. Early maturing beans were located in Minnesota and 80 to 90 day corn was planted. Beans in the fall yielded from 15 to 20 bushels while some replant corn, planted the 1st week of July and not receiving any moisture after that date, yielded as high as 50 bushels to the acre.

A twilight tour was held on the Lauren Wright farm in Jackson township in August. The purpose was to inform the businessmen of Montezuma the steps and progress being made in conserving soil and in turn their effect on business income. The Wright farm has a complete program of applied soil conservation practices. The group was divided among three trucks with a representative from the District in charge. As the trucks progressed over the farm the various practices were pointed out and explained. The tour was followed by a picnic supper at the farm pond.

PROGRESS IN DEVELOPMENT OF CONSERVATION PLANS

During 1953 the District technician assisted 27 farmers in developing basic conservation plans. In addition 43 conservation guides were prepared and placed in the hands of cooperators. Initial agreements were signed by 82 new cooperators.

The District is still operating on the backlog of names received some three years ago when applications were received on a group basis only. There are approximately 39 of these yet unplanned.



Farm Planning Tour. R. C. Lincoln group, discussing conservation practice on Lauren Wright farm.

Progress in developing basic plans has picked up somewhat from last year, but still is short of what it was before A.C.P. responsibilities were added to the duties of the S.C.D. staff.

As experience is gained in supervising and checking A.C.P. practices, less time will be required, allowing more attention to be devoted to basic conservation planning which is the important goal of the District.

FOLLOW-UP

Follow-up of older farm plans has been continued as time permitted. This year 45 follow-up calls were made and 4 conservation plans revised.

FIELD OPERATIONS WEATHER

The dry characteristics of 1952 were also present in 1953 except that the dry weather arrived earlier than in 1952, and had a much more depressing effect on crop yields.

Weather in the spring was about average—neither early or late—as compared to the early spring of 1952. Some corn needed to be replanted which is often the case.

Moisture was ample for germination of corn and establishment of grass seedings. Rains over the county could not be considered unusually erosive except in spots. The area around Malcom might be mentioned as an exception which also received a very destructive hail July 2. Several fields of corn and small grain were completely knocked out.

After the forepart of July, rains of any significance practically stopped. As the season progressed it became dryer and dryer. Fortunately the real hot weather was mostly delayed until August. Corn yield were cut but no crop failures resulted. Productivity of pastures declined steadily until most of them were little more than exercising areas in the fall. About the only things green were the alfalfa-brome meadows and pastures. The winter feeding season was started earlier than usual.



Cultivating corn on the contour, Kenneth Dieterich, Brooklyn.

There is some concern about the ability of new seeding to live through the winter in the extremely dry soil. No rain of importance occurred before freeze-up and it is doubtful if precipitation since then would penetrate enough to do any good.

The extremely dry soil seriously hindered terracing and diversion construction with farm tractors and plows. Heavier equipment was able to work about as usual.



A grass waterway on the Harvey Harris farm northeast of Grinnell.

GRASS WATERWAYS

Good grass waterways are the first and most essential soil conservation practice on a farm because contouring, strip cropping, terraces, and diversions all depend upon good waterways for effective operation.

As was true in 1952, spring provided the only opportunity to establish grass in waterways. A few waterways were shaped in the summer and fall but grass could not be established due to the dry weather. Such difficulties have tended to keep our waterway establishment behind schedule.

It is gratifying to notice, however, a growing recognition of the need of grass waterways even among farmers who have not accepted other conservation practices, such as contouring and terracing. The farmer who does not leave at least a little grass in his cropland draws is an exception.

Perhaps the best grass for well drained draws is brome with some timothy added for quicker establishment. For wet draws reed canary grass is first. Since canary grass is an uncertain seeder, establishment by sod pieces should supplement reed canary seeding in waterways. To provide a supply of such sod, a "sod bank" or sod patch on every sloping farm in the District would be a worthy goal.

STRIP CROPPING

Farmers who have established strip cropping are pleased with the practice and sold on its efficiency to save soil.

Strip cropping in some form is used on about half of the farms planned. Many slopes are too short to lay out a system of strips after an area that should be retired is taken out. On farms where all land can be pasture in rotation, strip cropping complicates fencing somewhat.



Strip cropping and diversions on Wayne Reams farm, Sheridan Township.

TERRACES AND DIVERSIONS

Diversions are more popular than terraces although terraces more effectively control erosion. The only objection raised to terraces by most farmers is the difficulty encountered in farming over them with some machinery. Recent modified specifications which provide for more grade and less terrace height should help to remove this objection. Agreement is unanimous in the efficiency of terraces to control erosion.

Some terrace and diversion construction got underway in the spring but very little was done in the fall due to the dry, hard condition of the ground. Many miles of terraces and diversions were on schedule that did not get done. We are hoping that 1954 will be more favorable for such work.

PROMISING CROPS

Birdsfoot trefoil continues to hold the greatest promise as a permanent pasture legume for the county. It appears to be better adapted to low fertility, rolling land than any other legume available. It is drouth-resistant and has presented no bloat hazard to date.

One particularly good example of birdsfoot trefoil pasture is on the Bruce Livingston farm 1 mile north of Montezuma. Observations indicate that the domestic or Empire strain is superior for pastures.

The use of ladino clover is increasing steadily in pasture mixtures on the better soils. Winter killing and bloat hazard are probably its chief faults.

It seems certain alta fescue will find a place in waterway mixtures and frequently tramped portions of permanent pastures. Its principal fault is a marked tendency to become unpalatable if allowed to grow tall.



Multiflora rose fence 2 years old, Lauren Wright farm, Montezuma.

LIVING FENCES

Multiflora rose was first tried in Poweshiek County in 1948 with a few small plantings. Since then many thousands have been set for living fences. Establishment was poor from most of the early attempts due to inferior planting stock.

The first good stands were planted in the spring of 1950. Several of these are now high enough to turn livestock after three years growth.

The fact that multiflora rose is of great benefit to wildlife is becoming evident. Numerous nests of songbirds have been observed in rose hedges and upland game is using the cover.

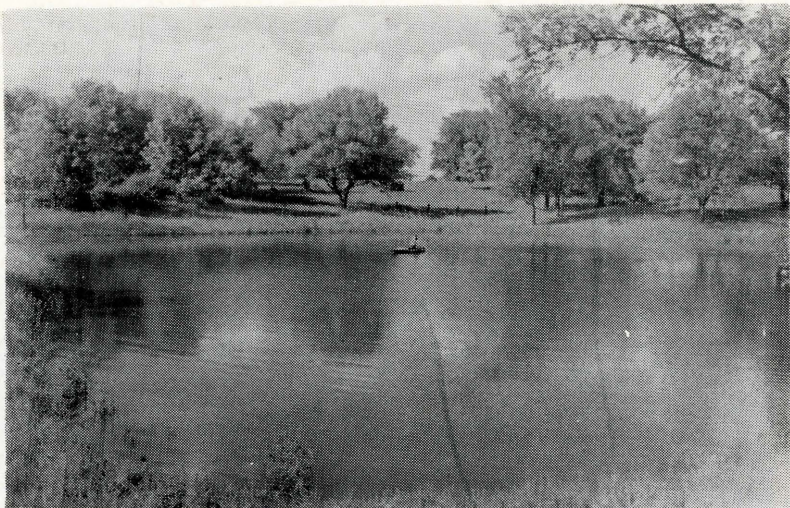
District cooperators planted 12,500 multiflora roses in the spring of 1953. An unestimated number were planted on farms of non-district cooperators. Source of supply included S.C.S. nurseries, State Conservation Commission, and private nurseries.

TREES AND WILDLIFE

Approximately 5000 Scotch pine were secured from the S.C.S. nursery for planting in the county. The program needs to be emphasized because there are numerous areas on which trees will produce the best crop. The principal problems involved in tree planting are low returns, delayed returns, and marketing. Hardwood trees are reasonably fast growing but of low commercial value. Evergreens have fair value but require many years for a crop, and finally when the crop is ready for sale the small volume makes it difficult to get what the timber is worth.

In spite of these problems, tree planting is a phase of conservation that needs a great deal more emphasis.

Wildlife packets furnished by the S.C.S. nurseries were distributed to cooperators with new ponds. Such packets contain evergreens and shrubs intended for planting around farm ponds, along fences, and in miscellaneous odd areas. The purpose is to improve cover for wildlife.



Farm pond, Charles Hudson farm, Montezuma.

PONDS

The construction of 9 ponds was supervised by the District Staff. Seven of these were on farms of District Cooperators. Thirteen were stocked with bass and bluegill fingerlings from the Federal Fish and Wildlife Service.

For some reason not understood, the fish in several ponds winter-killed during the winter of 1952-1953. Apparently it was not due to shallow water as some of the most severe killing was in ponds with good depth of water. Killed fish revealed that black bass up to 5 pounds or more are present in some ponds.

An enlivened interest in building farm ponds developed late in the fall due to water supply failure on many farms. Where suitable sites are available, ponds offer possibilities of providing live-stock water supply at a substantial saving as compared to deep wells.

Ponds are a dependable source of water if properly constructed with material of sufficient water-holding properties, and with proper balance between watershed and pond area.

USE OF FUNDS PROVIDED BY THE STATE OF IOWA

Good use has been made of funds appropriated by the State of Iowa. A total of \$3200.00 was allocated to the District under the IIA budget for the 1953-1954 fiscal year. Before July 1, 1953, funds were used to hire a full-time clerk. Due to the increased clerical work in District office, this has provided much needed assistance as well as permitting the office to be kept open. A new clerk's desk, chair, and typewriter furnished by the State were necessary additions to the District office.

Since the \$3200.00 allocation will not cover the salary of both a full-time clerk and technician, it is planned to carry a full-time

clerk and some part-time technical help. When not employed by State funds the technician will work under the A.C.P. 5% authorization from the A.S.C.

Money allocated to the District under the IA budget for Commissioner's expenses, stationery, and other incidentals amounts to \$500.00 per year. If not used the first year of the biennium it is carried over to the following year. IA expenses were light in 1952 allowing unexpended funds to be carried over into 1953. Since a new commissioner was elected and banquet held in 1953, the surplus accumulating from 1952 was used to good advantage in financing prizes for the Soil Conservation Derby and for other expenses in connection with the election-banquet.



Soil District Office Clerk,
Miss Reatha Johnston

PROBLEMS AND OUTLOOK

The need of soil conservation continues to grow. This is due to the increased demand for food caused by the rapidly growing population. Now more than ever before there is a need for more efficient farming. We need greater production from less acres, less soil wastage, more use of fertilizer and improved crops. Water conservation definitely needs to be emphasized. Education and efficiency are of parallel importance at the present because of the "price squeeze" now facing American farmers.

There is a need to build a firm floor for a "permanent agriculture." American agriculture, as you know, has never operated on a pay-as-you-go basis as far as soil is concerned. It is time for each to realize the essential need of building and saving our rapidly-depleting and exhausted soil for future generations.

Problems faced by farmers and opportunities for conservation are greater in 1954 than in past years. Operating costs are higher, farm prices and profits on a whole are much lower. An ample supply of farm machinery is available, but at higher prices. There is a plentiful supply of fertilizer, but it is at a higher cost. An abundant supply of grass seed, at a cheaper price, should encour-

age seeding of grasses to replace corn acreage reduction. This should possibly supplement 1953 drouth conditions. Generous rains are badly needed because of the lack of moisture for another growing season. It has been many years since we have gone into the winter season with such a low water supply level.

It is too early to evaluate the effect on the District of the present administration's re-organization plan. Little immediate effect has been noted except for disturbing the morale of personnel somewhat.

Due to the added responsibility of A.C.P., the technician's time spent on planning has been reduced. Fewer basic plans have been made with less application of planned farms. More farmers have been contacted and helped on simpler practices than in previous years.

Initial agreements are now received on an individual basis rather than by groups. Neighborhood grouping is difficult under the three stage planning. The time of technicians is taken away from the District program to supervise and check A.C.P. work. Certification of tiling in particular has disrupted the District program more than any other practice. As a better procedure has been developed, there are prospects of improving this situation in 1954.

Cost sharing benefits of \$4000.00 have been set aside for small watershed development. Prospects are that there will be little trouble in lining up watersheds to take advantage of these benefits.

