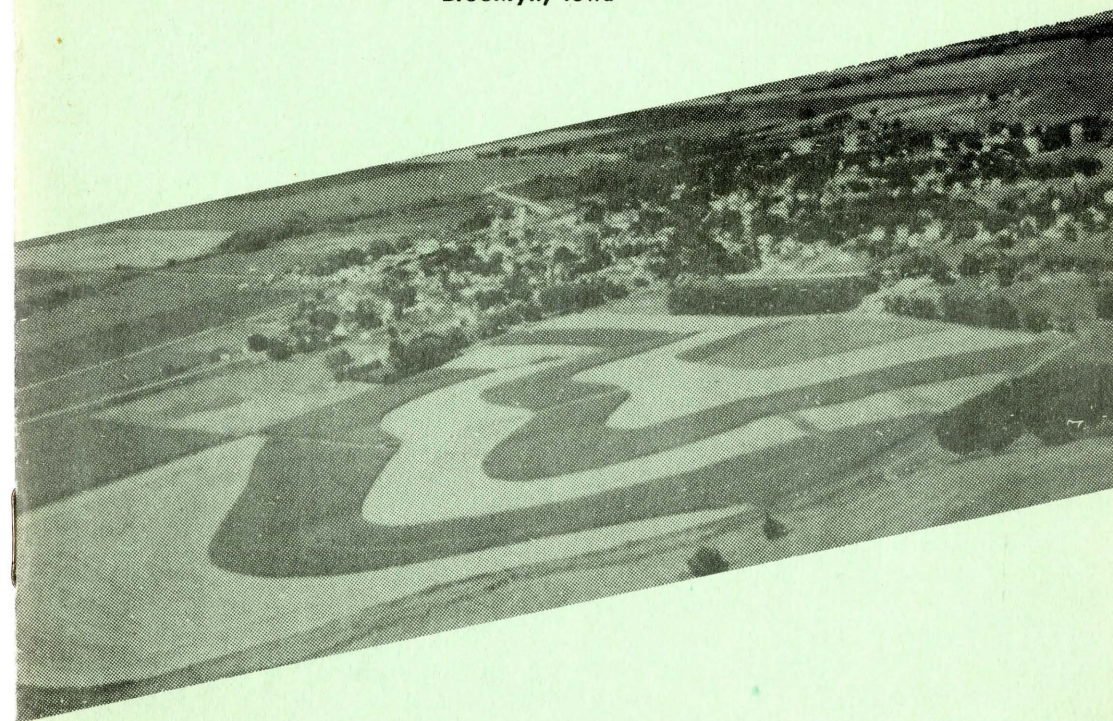


1954 Annual Report

Poweshiek County Soil Conservation District
Brooklyn, Iowa



1954

Annual Report

POWESHIEK COUNTY
CONSERVATION DISTRICT
Brooklyn, Iowa



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

At the close of nine years of conservation planning and practice in the county we are proud of the progress that has been made.

It is interesting to observe the results of the program as you drive about in the country, not only by the cooperators but also by some neighbors who have seen results which is encouraging.

Productive land is the main source of food, clothing and shelter for the American people. The conservation and improvement of this resource for sustained productive use is an undertaking of vital concern to citizens of all walks of life.

The District Commissioners are Howard Sears, Lauren Wright and Basil Brush—The District staff are Morton James, Archie Casebolt, Raymond DePauw and Beverly Johnston, Clerk—Harlon Backhaus, Area Conservationist—Roger Sandage, Extension Director.

DISTRICT AWARDS & CONTEST

For the second successive year the Poweshiek County Soil District Commissioners take just pride in having one of their number selected as outstanding District Commissioner in Region Five including 11 east central Iowa Soil Districts. The contest was sponsored by the Des Moines Register and Tribune and the Iowa Association of Soil District Commissioners.

Mr. J. Basil Brush was recipient of the award.



Rural schools' conservation tour Oct. 26, 1954 on Wayne Reams farm, 9 miles northwest of Malcom.

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 and insect and weed control and proper use of fertilizer has steadily increased 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.

Because of an unusual mid-season drouth in 1954, fertilizer application did not prove as profitable as in normal years. Due to this unusual weather pattern, late maturing corn showed highest yields. Practices such as early planting, planting earlier maturing varieties, and addition of starter fertilizers were in most instances unprofitable. There still was definite indication that high soil fertility is basic for high yields.

Three five acre corn yield contest plots were harvested in the fall of 1954. Varying results from the use of commercial fertilizers were obtained. Carl Tokle produced 114 bu. per acre on clover sod with moderate commercial fertilizer applications and 5 tons manure per acre. Good sound rotations and good land use are necessary in high yields; commercial fertilizer should be used as a supplemental source of nutrients.



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

At the close of nine years of conservation planning and practice in the county we are proud of the progress that has been made.

It is interesting to observe the results of the program as you drive about in the country, not only by the cooperators but also by some neighbors who have seen results which is encouraging.

Productive land is the main source of food, clothing and shelter for the American people. The conservation and improvement of this resource for sustained productive use is an undertaking of vital concern to citizens of all walks of life.

The District Commissioners are Howard Sears, Lauren Wright and Basil Brush—The District staff are Morton James, Archie Casebolt, Raymond DePauw and Beverly Johnston, Clerk—Harlon Backhaus, Area Conservationist—Roger Sandage, Extension Director.

DISTRICT AWARDS & CONTEST

For the second successive year the Poweshiek County Soil District Commissioners take just pride in having one of their number selected as outstanding District Commissioner in Region Five including 11 east central Iowa Soil Districts. The contest was sponsored by the Des Moines Register and Tribune and the Iowa Association of Soil District Commissioners.

Mr. J. Basil Brush was recipient of the award.



Rural schools' conservation tour Oct. 26, 1954 on Wayne Reams farm, 9 miles northwest of Malcom.

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 and insect and weed control and proper use of fertilizer has steadily increased 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.

Because of an unusual mid-season drouth in 1954, fertilizer application did not prove as profitable as in normal years. Due to this unusual weather pattern, late maturing corn showed highest yields. Practices such as early planting, planting earlier maturing varieties, and addition of starter fertilizers were in most instances unprofitable. There still was definite indication that high soil fertility is basic for high yields.

Three five acre corn yield contest plots were harvested in the fall of 1954. Varying results from the use of commercial fertilizers were obtained. Carl Tokle produced 114 bu. per acre on clover sod with moderate commercial fertilizer applications and 5 tons manure per acre. Good sound rotations and good land use are necessary in high yields; commercial fertilizer should be used as a supplemental source of nutrients.

Several abnormal conditions were present during the growing season which greatly influenced farm people of Poweshiek County. The mid-season drouth was accompanied by European corn-borers and grasshopper infestations. Earlier in the season, we had some pea aphid infestation in alfalfa which was successfully controlled by DDT spraying on those fields not being used for dairy cattle. Extensive hail damage again lowered production of corn appreciably. Insurance adjustments up to 40% were made. Grasshopper damage was largely on legumes and meadows—rains in mid-August halted them before much damage to corn. European corn borer did very extensive damage. Though some what spotted, they were present in all parts of the county and in cases were credited with a 25 bushel an acre reduction in corn yields.

Two twilight tours were held this summer. Grinnell business men attended a tour on the Wayne Reams farm and Brooklyn business men toured a farm also. The purpose was to inform them of the steps and progress being made in conserving soil and, in turn, their effect on business income. The groups were transported over the farm in trucks and the various practices were pointed out and explained. The tours were followed by picnic suppers at farm ponds.



Tour on Wright farm in Bandstra watershed group, Sept. 8, 1954. From left, Gerret Bandstra, Walter Hill, Lauren Wright, John Clevenger, Paul DeJong and Carroll Estcott.

PROGRESS IN DEVELOPMENT OF CONSERVATION PLANS

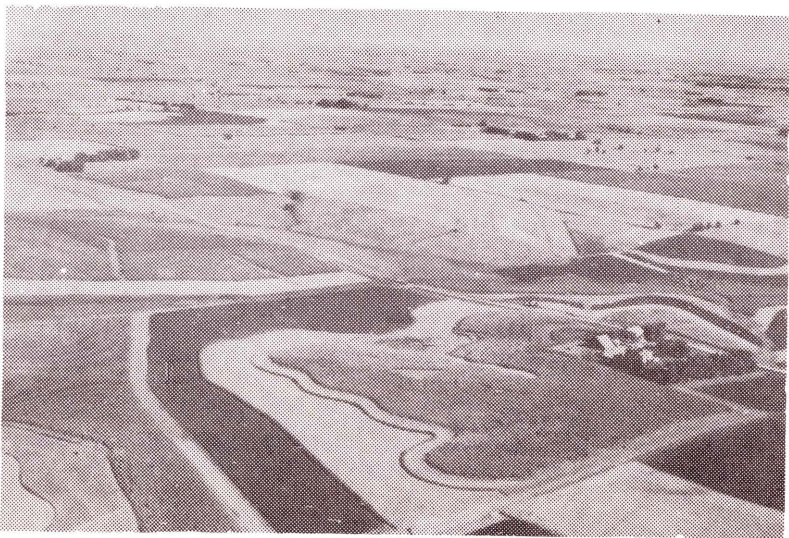
During 1954 District technicians assisted 33 farmers in developing basic conservation plans. Conservation guides were prepared and placed in the hands of 29 cooperators. Some 50 farmers signed initial agreements and became cooperators of the district for the first time.

The District is still operating on a backlog of names received over three years ago when applications were received on a group basis only. The Henry Rosburg Group in Deep River Township, the only one remaining unassisted is scheduled for help early in 1955.

Members of the above group together with applications scattered over the county now comprise a backlog of 75 farmers waiting for help in developing basic conservation plans.

Progress in basic farm planning has continued to improve but is still not keeping pace with new applications.

Although improvement has been made in servicing the ACP program, it remains the chief reason for retarded progress in conservation planning.



Lauren Wright farm, Montezuma, Aug. 3, 1954, showing a complete conservation farm plan applied on the land.

FOLLOW-UP

Follow-up of older farm plans has continued as time permitted. This year 150 calls were made and 4 conservation plans revised.

FIELD OPERATIONS

Weather

Of all the factors influencing farm operation weather is the most important. As was true the three previous years the year began with a deficiency of moisture, although the precipitation which did occur was used with almost 100 percent efficiency. Snow and rains early in the spring falling on unfrozen soil were absorbed with little or no run-off.

Temperatures in the spring were about average and the season perhaps somewhat earlier than usual. Due to favorable soil conditions corn planting was ahead of schedule and very little if any replanting was required. Moisture was ample for germination of corn and for establishment of grass seedings. No unusually hard or destructive rains occurred in May or June when the soil is the most vulnerable to erosion. In fact very little rain occurred of any kind as the season progressed it became dryer and dryer resulting in poor pollination and noticeable damage to the corn crop. The oat crop, in contrast to previous years, yielded well and was of excellent quality.

By the end of July grass seedings which looked good in May and June had just about passed out of the picture. The aftermath of seedings, foxtail and weeds which usually take over the small grain stubble after the grain is removed was totally absent. The stubbles were too dry—even for weak growth and presented not much hope for new seedings.

Then in early August the weather man pulled a surprise by soaking the parched soil with more moisture than occurred any time during the summer.

The recovery of plant life was dramatic and seedings which were thought to be knocked out came to life. Then something occurred that happens only once in a lifetime. Rather than small grain stubbles growing up to weeds the oats shattered from combining operations germinated and produced many fields of second crop oats equal to good spring seeded crops. These produced an abundance of aftermath pasture and hay adding considerably to the farm feed supply and delaying the feeding season.

Rains again occurred in October helping further to restore the depleted subsoil moisture.

From the stand point of subsoil moisture seedings were in a more favorable condition to go into the winter than a year earlier.

Probably the most significant influence of the weather on conservation was mild open fall weather which permitted record breaking application of diversion terraces and pond building. Much tiling was done and waterways shaped also.

For the first time in five or six years fall moisture conditions were favorable for building diversion terraces with farm tractors and plows.

GRASS WATERWAYS

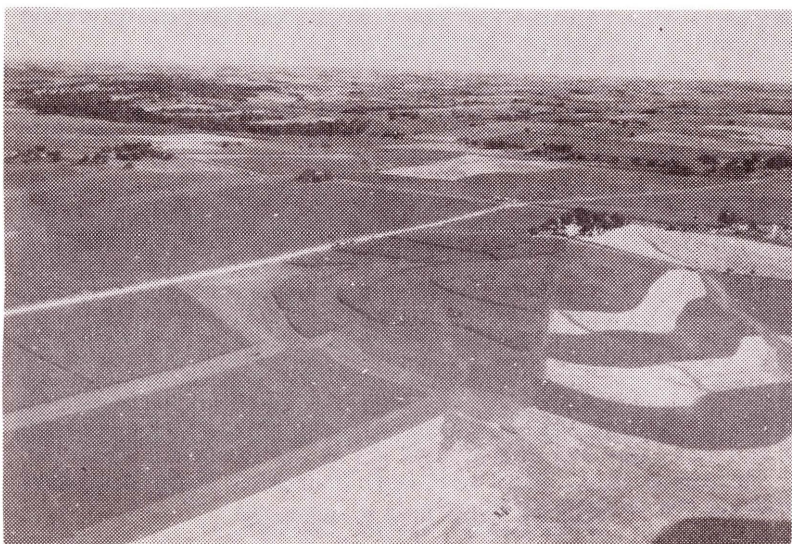
A good grass waterway system is the key to an effective conservation program because contouring, strip cropping, terraces, and diversions all depend upon good waterways for effective operation.

It is gratifying to observe a growing recognition of the need of grass waterways even among farmers who have not accepted other conservation practices such as contouring, strip cropping and ter-

rating. As an aerial flight over the county will reveal, the farmer who does not have at least a little grass in cropland draws is an exception.

Brome grass remains one of the best grasses for well drained draws with a little timothy added for quicker establishment. For wet draws reed canary has no substitute. Its principal fault is uncertain seeding and slow establishment which can be partly overcome by using sod pieces or green stems. The latter is successful only in ditches which are definitely wet or muddy.

Recent observations indicate that alta fescue has promise as a waterway grass. It seems to have a good root system, is not relished as well by livestock, and is intermediate between brome and canary grass as to soil requirements.



Division II winner, Harry Edelen, $\frac{1}{2}$ mile east of Brooklyn on Hartwick road. Strip cropping and general farm layout shown, with corn and alfalfa strip left and oats and alfalfa strips right.

STRIP CROPPING

On farms having a considerable percentage of permanent pasture or in cases where rotation grazing is not practiced, strip cropping often offers the most satisfactory method of saving soil and water. Farmers who have installed strip cropping are pleased with the practice and sold on its efficiency to save soil.

Strip cropping in some form is practiced on about half of the farms having conservation plans.

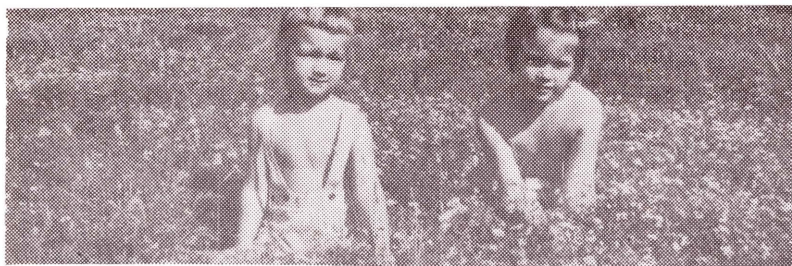


Cooperation in Conservation in Raymond Vogt group. Glen and Paul Vogt (brothers) and Raymond Vogt (cousin) pool their power to get diversion terraces built in a hurry. Picture was taken November, 1954 3 miles east of Grinnell.

TERRACES AND DIVERSION

The progress in building terraces and diversion in 1954 was a record breaker. A combined total of over 23 miles of terraces and diversions were built in 1954. This was at least 500 percent greater than constructed any previous year.

The up-surge was due to a number of factors including, favorable soil and weather conditions in spring and fall, more acceptable terrace design, and full ACP cost sharing in late fall. In addition there may have been a tendency to "catch up" on jobs held over from previous unfavorable years.



Birdsfoot trefoil field on Bruce Livingston farm, July, 1954, showing the Livingston children.

PROMISING CROPS

Birdsfoot trefoil continues gain in popularity as a permanent pasture legume in the county. More farmers are becoming interested and including it in their pasture renovation program.

It is worthy to note that the County ASC Committee has made the inclusion of birdsfoot trefoil mandatory in all mixtures for permanent pasture seedings where cost sharing is allowed. It is important to mention that the Domestic or Empire strain is much to be preferred as no stands of the Italian strains in the county have survived over a year or two.

As mentioned elsewhere, alta fescue seems to be finding a place in grass waterways and frequently tramped portions of permanent pastures. For the above purposes its "good fault" is a tendency to become unpalatable.



Ray Anthony farm northwest of Brooklyn, July, 1954, showing cattle in a multiflora rose fenced pasture.

LIVING FENCES

Multiflora rose was first tried in Poweshiek County in 1943. Since then a number of plantings have matured enough to be used as living fences.

Some of these older plantings are on the farms of Arlo Taylor, Dean McWilliams & George Rank of Deep River Township; J. J. Boatman, Basil Hicks and Lauren Wright of Jackson Township; George Norden, Lincoln Township; Margaret McHarg, Warren Township; Kenneth Dieterich, Scott Township; Glen Cook & Ray George, Pleasant Township; Ray Anthony and Miles Clayton, Madison Township; Earl Fowler, Grant Township.

There is no question as to the efficiency of multiflora rose for wild-life cover and the number of plantings now under trial should give an early answer as to their efficiency as living fences.

District cooperators planted over 20,000 rose plants in the spring of 1954. Planting stock was obtained from a private nursery after it was found that the State Conservation Commission experienced a near failure in the 1953-54 crop and was unable to fill orders.

TREES AND WILDLIFE

Forestry needs to be emphasized because there are numerous areas in the county on which trees will produce the most profitable crop.

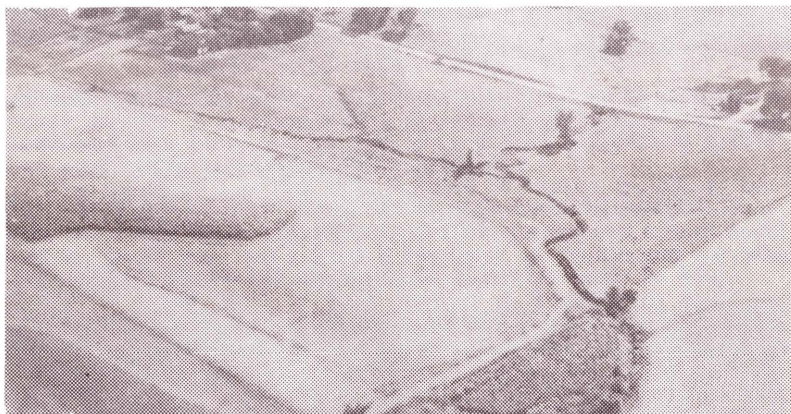
The chief problems involved in forestry production are low returns, delayed returns and marketing. Adapted hardwood trees are reasonably fast growing but of low commercial value. Evergreens normally have good commercial value but require many years to produce a crop and finally when the timber is ready for sale small volume makes it difficult to get what the crop is worth.

Multiflora rose constitute the principal wildlife cover improvement plantings. At present most of these plantings are living fences. Prior to 1954 the Soil Conservation Service nurseries made wildlife packets available to districts for planting around ponds and in odd areas. This source is no longer available since the SCS nurseries have been discontinued.

PONDS

The construction of 32 ponds were supervised by technicians of the Soil Conservation Service. This is an increase of 100 percent over the largest previous year.

The enlivened interest in pond building is related to the failure of many shallow wells due to continued dry weather. Where suitable sites are available, ponds offer possibilities of providing livestock water supply at a substantial saving as compared to deep wells. In numerous cases where ponds are located close to farmsteads water is pumped from the pond supplying all needs except drinking.



A "before" picture of the gully on the Paul DeJong and Henry Willemsen farms near Taintor. A structure will be located in the gully on the boundary line at the lower right hand corner.

WATERSHEDS

One of the principal features of the 1954 District program was the sponsoring of watershed development. It was decided to select watershed on a 100 percent participation basis. It was felt that by a thorough treatment of the entire watershed the benefits of soil and water conservation could better be illustrated. In cooperation with the County ASC Committee \$5,000.00 was set aside for full-cost sharing of designated practices in two watersheds. The two watersheds selected were the Harley Hillman Group in Deep River containing 407 acres and the Gerrit Bandstra Group in Sugar Creek Township with 1,166 acres.

Although getting a late start, considering the preliminary surveying needed, a structure and a pond were completed in the Hillman Watershed in addition to considerable contouring and shaping of waterway.

In the Bandstra Watershed, and area in the county having little previous conservation activity, the entire area was soil surveyed, seven conservation plans were developed, two structures completed and one started, 2.35 miles of diversion terraces built, a substantial number of waterways shaped and a 500 percent increase in contour farming secured over previous years.

A good start has been made but much remains to be done to reach the goal of thoroughness desired. To help complete the unfinished job, the commissioners in cooperation with the County ASC Committee plan to set aside necessary funds for full cost sharing through 1955.

It is the policy of the District to encourage organization of neighborhood groups into watersheds. Present policy is to extend full cost sharing benefits to such groups as funds make it possible.



Henry Willemsen and Paul DeJong inspect plans for a structure to be built on their farm boundary to provide a crossing for Willemsen and gully control for DeJong. Bruce and Wayne Willemsen are at the left.

USE OF FUNDS PROVIDED BY THE STATE OF IOWA

A total of \$3,000.00 was allocated to the District under the II-A budget for the 1954-1955 fiscal year. Part of these funds have been used to continue the employment of a full time clerk. Since clerical work has tended to increase, this has provided very much needed assistance.

In addition to the clerk's salary the fund has paid part time technical help in the peak load seasons.

Money allocated to the District under the I-A budget for commissioners expenses, stationery, prizes 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. Expenditures from this fund in 1954 were less than \$500.00. Therefore, the balance will be carried over into the first half of 1955 when it can be used to good advantage in connection with the district commissioners biennial-election banquet.



State Clerk Miss Beverly Johnston

PROBLEMS AND OUTLOOK

The past two seasons with below normal rain fall have been trying times in establishing grass waterways. A few showers in early Sept. came at the right time for new seedings and pasture, although we are short of moisture for another year.

The dry season has demonstrated the result of good land practice, it is interesting to note where good land use was applied that there were good crops in spite of drouth and insects.

Two small watershed groups were organized in the county on cost sharing plan in 1954 and no doubt there will be others in the coming year.

There is still the problem of high operating costs, seed, fertilizer, machinery, labor costs are up and farm income seems to be a little lower.

