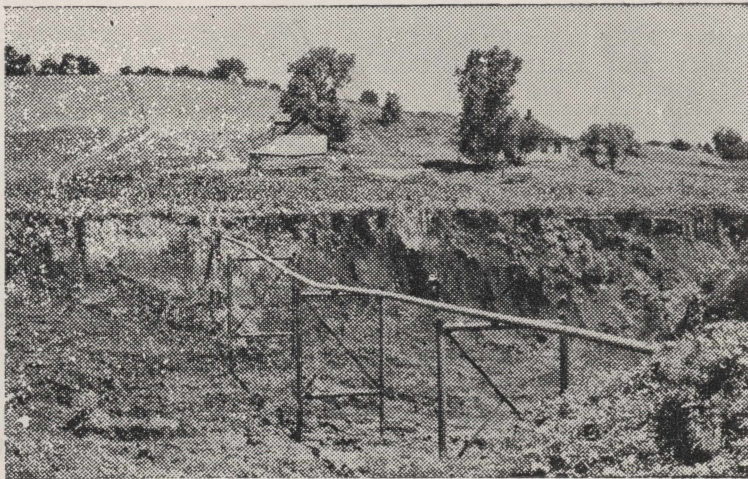


WEST POTTAWATTAMIE SOIL CONSERVATION DISTRICT

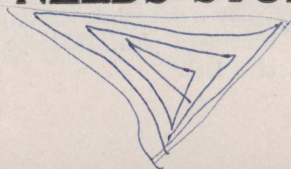
1961 ANNUAL REPORT

AND



See story inside cover.

CONSERVATION NEEDS STUDY REPORT



FORWARD

Today when we are constantly confronted with crop surplus and acreage reduction we would assume that we are indeed living in a "Land of Plenty" but for our tremendous production a price must be paid.

We have taxed our soil to the utmost during the years. Our soil had to pay a price for this effort. The results are apparent, if one will only look. Soil bared by erosion, gullied in many instances, exhausted: thus we know not only the people pay the supreme sacrifice.

Still another problem confronts us, our increasing population and consequently diminishing acres of land per person. This will in time banish our surplus and demand our land be tilled and treated with more care in order for each one to achieve his accustomed way of life. We as District Commissioners of the West Pottawattamie Soil Conservation District also feel that more emphasis needs to be placed on grass and pasture improvements to maintain the soil and increase production. In the early days of the district a great deal of work was done on the seeding of brome and alfalfa. This practice has contributed much to the economy of this area as well as a tremendous aid to reducing soil loss. We think this is a tool that we need to examine again and use to better advantage. The farmers who are using improved pasture of brome, alfalfa, and orchard grass are sure that if well managed, these are the most productive acres on the farm as well as the most soil conserving.

—Louie Fahrenkrog, Chairman

DISTRICT ACTIVITIES

Louie Fahrenkrog and Eldon Ravlin, Commissioners attended the short course at the Iowa State University.

The District paid the tuition for one Council Bluffs teacher to the Springbrook State Teachers Conservation Camp at Guthrie Center.

Soil Stewardship Week was observed in many of the rural churches.

Erwin Cole, Service Photographer, took pictures of all of the structure sites in Ryan-Henschal Watershed.

Norther Pigeon Watershed, held meetings for all watershed members on the 17th of April and the State Advisory Committee toured the watershed on April 26th.

An organization meeting was held in the Masonic Temple at Quick, Iowa with the Mamie Creek Watershed Group. Movie "Waterbill USA" was shown.

Meeting cooperating with the Extension Service, Conservation Commission, and Rue School Officials held Conservation Classes with the 8th graders from the Rue School in all a total of 250 students have received conservation training through the spring Outdoor Education Program. In the fall, all of the 6th grade of Franklin School received conservation Training.

Ryan-Henschal and Indian Creek Watersheds were approved by Congress for construction.

COVER PICTURE

This is a widely publicized picture that was taken back in 1947. It shows the American Oil Company pipeline temporarily suspended over a large gulley in the Indian Creek Watershed north of Council Bluffs. In the 15 years that followed the gulley grew deeper and wider and today this pipeline is suspended on steel cables that are anchored on either bank. With the approval by Congress of the work to be done in Indian Creek this gully will finally be controlled with a series of gully stabilization structures to be built during the construction phase of the Indian Creek Watershed plan. The pipe you see here was once laid in the ground at a uniform depth of 3 feet.

DISTRICT ACCOMPLISHMENTS

		1961 Accomplishments	1962 Goal	On the land
District Cooperators	No.	69	50	1,218
Basic Plans	No.	31	40	866
Revised Plans	No.	15	20	201
Follow-up	No.	221	240	
Structures	No.	7	9	95
Grassed Waterways	Ac.	52	53	1,848
Terraces (all)	Mi.	74	79	2,085
Open Ditch (all)	Mi.	8	7	105
Tile	Mi.	12	8	15
Contouring	Ac.	2,888		



This picture shows the District Commissioners and their Assistants studying watershed plans for 1962. Those in the picture are from left to right; Jack O'Hara, Eldon Ravlin, Louie Fahrenkrog, Donald Bladt and Joe Osborn. The maps in the background are of Indian Creek Watershed and Ryan-Henschal Watershed.

DISTRICT COMMISSIONERS

Louie Fahrenkrog, Chairman
Donald Bladt, Vice-Chairman
Eldon Ravlin, Commissioner
Clifford Johnson, Secretary
Mary Graeves, Clerk-Treasurer

Assistant Commissioners

Jack O'Hara
Joe Osborn

S. C. S. Technicians

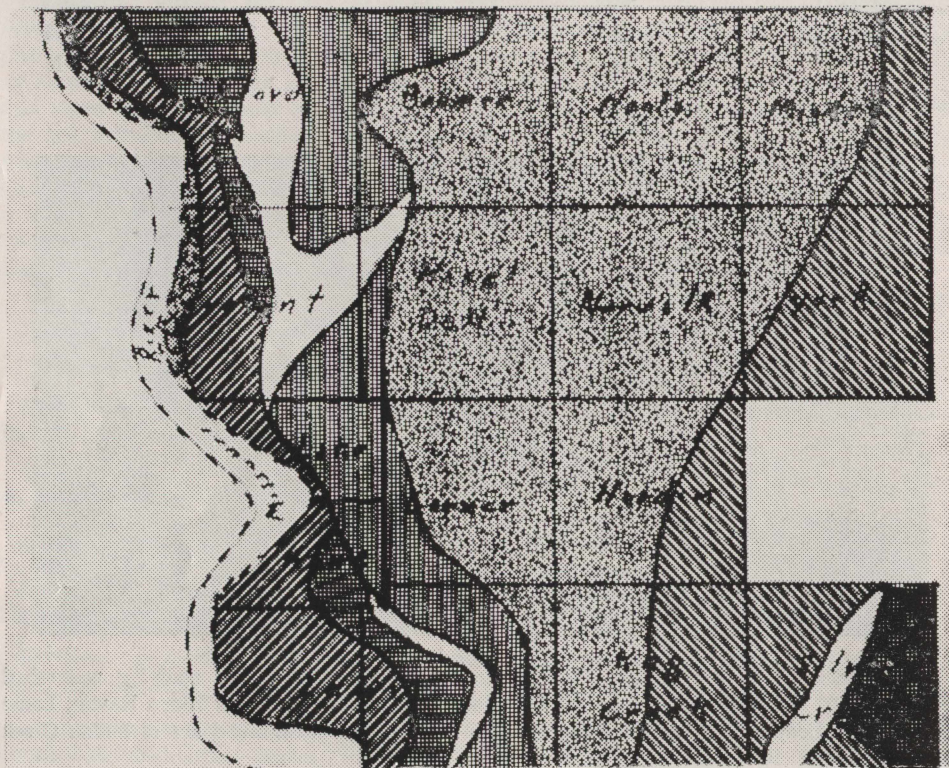
Leon Foderberg, Work Unit Conservationist
Oliver Hall, Conservation Aid
Perry Thomas, Conservation Aid
Paul Muhs, Conservation Aid (WAE)

All of the many people that knew Dick Hogue were sorry to see him leave but at the same time were happy for his promotion to Area Conservationist in New York State. His new address is 26 Harvester Ave., Batavia, New York. Replacing Hogue in August was Leon Foderberg, who transferred from Chariton, Iowa.

CONSERVATION NEEDS INVENTORY

West Pottawattamie Soil Conservation District takes a short look back and a long look ahead. Over the past 17 years much good conservation work has been accomplished by the farmers of this District. A record to be proud of has been made in the past year. Conservation practices much needed to protect our farms from erosion have been applied at record rates. But now is the time to take inventory. Look ahead, and recognize the job yet to be done.

A committee of agricultural leaders was selected to study the future needs of this county. Based on the problem area map shown here these are the conservation needs by 1975 as estimated at this time.



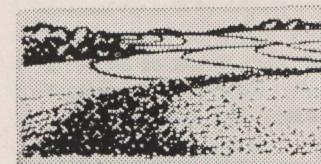
Acreage — Land Resource Units West Pottawattamie County

	Riverwash, Missouri bottomland	6,700 acres
	Sandy and medium textured Missouri bottomland	26,950 acres
	Heavy textured Missouri bottomland	14,590 acres
	Medium textured first and second bottomland	15,970 acres
	Hilly and steep Ida-Monona-Hamburg area	40,000 acres
	Hilly and rolling Ida-Monona area	139,050 acres
	Rolling Monona-Marshall area	65,480 acres
	Rolling Marshall area	10,000 acres

On the following page are the pictures of the various practices needed. Below each picture is the amount of that practice still remaining to be put on the land. This is the goal by 1975.

On cropland, the mechanical practices to reduce slope length are level terraces, diversion terraces and contouring. Practices needed to handle run-off water are grassed waterways and grade stabilization structures. Cultural and vegetative practices such as contouring,

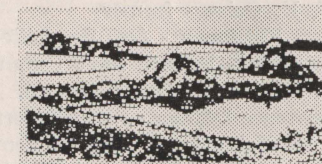
crop residue use and cover crops will be used to reduce run-off by improving soil tilth and the insoak of water.



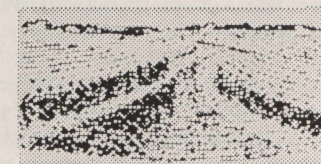
Terraces—6,967 Miles



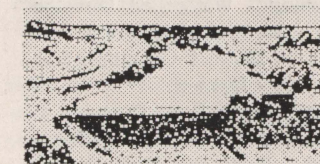
Contour—112,000 Acres



Structures—1,534

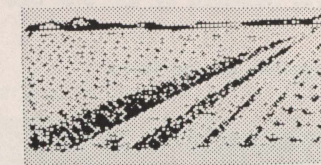


Waterways—3,654 Acres

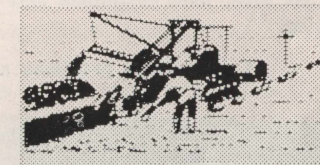


Watershed Projects—15

Mechanical practices needed to remove surface water and control sub-surface water level are surface field ditches, tiling and land grading.

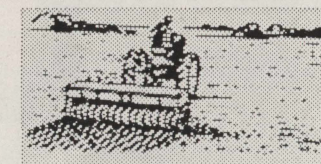


Drainage Ditch—220 miles

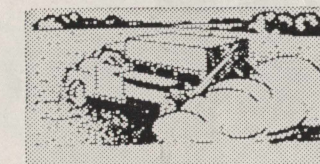


Tiling—66 miles

On grassland the following practices will protect and improve the soil condition and forage quality of pastures; pasture seeding, fertilization and controlled grazing.



Pasture Improvement



Pasture Fertilizing

On woodland give protection from fire, and grazing and use good management practices in harvesting and replanting trees. Include wildlife plantings in odd areas.



Woodland



Wildlife

This conservation needs study was put into this District report because there is a great and urgent need to speed up the rate of application of all soil and water conservation practices. As an example, a little less than 2100 miles of terraces were installed in 17 years. At this rate it would take 56 years more to put on the terraces needed to satisfactorily protect the land in this county. It is therefore the policy of this District to speed up practice application by providing more technical help, and making the public more aware of the great need through news stories, tours of watersheds, and work with school children.

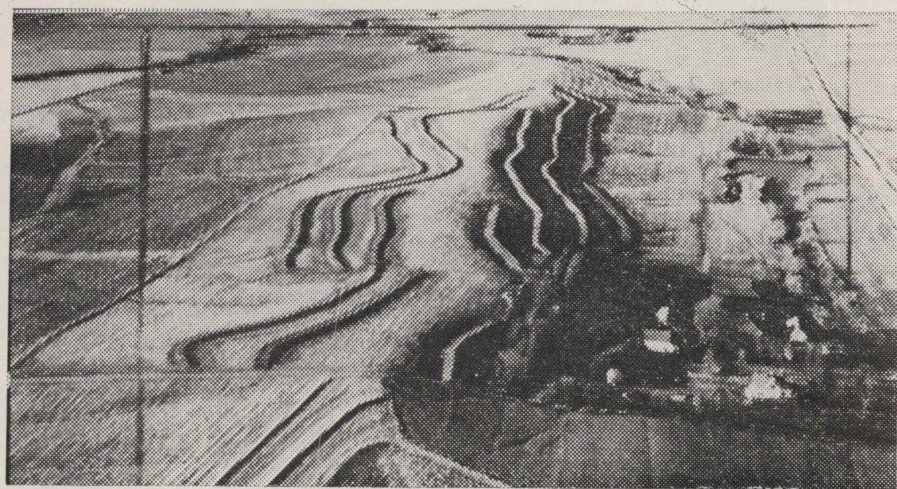
The members of the Conservation Needs Committee are listed below along with the organizations they represent.

W. H. Geise - farmer
Earl Knickman - ASC Committee
Al Fiala - Former Ass't Comm.
Donald Bladt - District Comm.
Lawrence Dittmer - Farmer, Former Dist. Comm.
Louie Fahrenkrog - District Commissioner
Francis Bell - Watershed Director
Oluff Larsen - Watershed Director
Edwin Klopping - Watershed Director
Earl Hough - Watershed Director
Eldon Ravlin - District Commissioner
Harvey Hansen - farmer
Richard Goos - Bank Loan Dept.
Tom Richman - State Savings Bank
Roy Scofield - Feed and Seed Dealer
Lou Ross - Council Bluffs Savings Bank
Bob Turner - City National Bank

Guy Draper - Board of Supervisors
Henry Johnk - Board of Supervisors
Henry Rodenburg - Board of Supervisors
John Anderson - Board of Supervisors
Ivan Olsen - Board of Supervisors
Myron Speer - Conservation Officer
M. Barker - Superintendent of Schools
John Sprugel - Voc. Agricultural
Gene Roe - Field man-Farm Bureau
Bob Summy - President of Farm Bureau
Herb Green - Extension Council
Clifford Johnson - Extension Director
Michael Miller - ASC Manager
C. W. McManamy - Farm Editor
Kenneth Alcorn - ASC Committee
John Hartwell - ASC Committee
Richard Hogue - WUC-SCS

The data on soils, land conditions and land uses was furnished by the U.S. Soil Conservation Service.

Conservation practices as they fit together on the farm.



Parallel terraces on the Jack Hartwell farm, 11 miles east of Council Bluffs. These terraces were built with dozer and scoop in the fall of 1960. In the gully at the right in this picture is an erosion control structure that has stopped additional damage by this ditch.

WATERSHED ACTIVITIES

RYAN-HENSCHAL WATERSHED was approved by Congress September 8, 1961 construction of structural measures will start in the summer of 1962. This watershed of 9,600 acres now has 120 miles of terraces, 115 acres of shaped and seeded waterways, 5 erosion control structures. Construction is planned at two structure sites this summer. With the additional help that will be forth-coming with the approval of the watershed the District will be able to furnish technical assistance to more coöperators in the lay-out of conservation practices. With this additional help we hope to get all practices needed above each structure before it is planned for construction.

INDIAN CREEK WATERSHED has been a problem to the city of Council Bluffs for as long as there has been a city. Through the years flooding and silt deposits have caused damage yearly to farms, homes, business, and industry. About 1947 was the start of a plan of action to reduce these losses. In September of 1961 Congress approved the construction phase of the program. It is planned to build 18 erosion control structures in the next 5 years if the upland conservation practices such as level terraces, basin terraces and waterways can be established. One structure is planned for the summer of 1962.

PONY CREEK - While the portion of Mills Pony Watershed that lies in West Pottawattamie is small a great deal of conservation work has been done. About 50 miles of terraces have already been built on the 1,500 acres that lays in Pottawattamie. There are no structures planned in this part of the watershed.

North Pigeon, Simon Run, Mamie Creek and Twin Ponies watersheds have their applications approved by the State Soil Conservation Committee and are working hard now getting more practices applied and hope to get Congressional approval this year.

What Is A Watershed?

—by Eldon Ravlin, District Commissioner

A watershed is the entire area which contributes runoff water to a given location on a stream below. We all live and work within a watershed whether we live on a farm or in a small town or have a business on Main Street. Our travels from day to day repeatedly take us across the drainage divides which separate one small watershed from another. Individual watersheds range in size from only a few acres to nearly 40 percent of the United States - like the watershed of the Mississippi River.

The first federal effort at watershed protection as a means of preventing floods was the Flood Control Act of 1936. In 1953 Congress Authorized 60 pilot watershed projects to demonstrate the value of the watershed approval in combining conservation practices with upstream flood prevention structures. Four pilot watersheds have been developed in Iowa. One of which is Mule Creek in Mills County.

The object of watershed development is to improve and develop the natural resources of the watershed so that everyone residing in it will have a safer and more rewarding place in which to live, work and play. This development involves getting maximum upland treatment with conservation practices consistent with efficient land use and home income. This makes a substantial contribution to flood prevention by providing upstream water impoundments behind terraces and structures.

Under the Watershed Protection and Flood Prevention Act 566 full responsibility for starting small watershed projects is placed on local people who plan and carry out an integrated watershed development program as a locally organized group of Citizens with local, state and federal agencies cooperating. Usually one or more persons will inquire about the benefits from watershed development programs and the requirements under the law. These inquiries may be brought to the District Commissioners, Soil Conservation Service, Extension Service, or the Agricultural Conservation Program.

Watershed needs in an area can be estimated by determining; what has been the damage to property such as land, road, railroads, bridges and livestock from floods in the last 10 years; what are the needs for soil and water conservation practices as shown by the conservation needs inventory; how fast is gully development destroying the land for future use; and last but not least, how fast can the local people complete this job?

WHY TERRACE?

It is a short question but there are numerous answers.

First, it enables the farmer to make more money, for field tests have shown that, all things being equal, the average corn yields on terraced slopes exceed the yields on unterraced slopes by 10 to 14 bushels per acre. By terracing a slope, top-soil and plant food are saved. The top-soil contains most of the available fertility and soil losses may be reduced 90 to 95% by a system of terraces.

Another reason for terracing is to keep fertilizers on the fields. Up to 50% of expensive fertilizers have been lost when corn was planted up and down hill. With terraces the efforts and expense put forth for improving fertility will have a much longer lasting effect.

Conserving moisture for critical periods rates high as a reason for terracing. On a 14% slope terraces plus contour listing have saved two inches of rainfall in a single storm. The inches of water saved will produce 10 bushels of corn. Terraces give protection to lower lying land by keeping run-off water where it falls and decreasing flood damage to valuable bottomland. A higher percentage of row crops can be grown in the rotation when terraces are used to control erosion. Terraces support contour farming when heavy rains cause breaks in contour rows, preventing sheet erosion and side hill gullyng. Terraces give year-around protection, but are visibly valuable if storms occur when a seedbed is prepared.

A permanent guide for Contour operations is provided by terraces and is a time-saving item for contour farming. Surface planting of corn on the contour does not have much water retaining capacity until the final cultivation. Terraces provide protection during this period. Take the run-off water away from a gully and nature will stabilize it. Terraces will halt gullies by holding the water on the hill. One mile of level terraces will hold sufficient water to cover two acres one foot deep. Terraces will materially help prevent floods. By storing run-off water in the soil of the slope and by reducing volume and velocity of run-off terraces aid in establishing sod waterways. Reducing volume of run-off reduces structural costs in a stabilizing and flood control program. Why Terrace?--To get that 10 to 15 extra bushels of corn per acre. For assistance call 32-81543, Ext. 24.

**West Pottawattamie Soil
Conservation District
Room 234, Fed. Bldg.
Box 647
Council Bluffs, Iowa**

