



Kossuth County Soil Conservation District

35th Annual Report — 1983



OFFICE STAFF

Loren Bishop, State Engineering Aide; Bruce Logemann, State Conservation Aide; Paul Ohland, District Conservationist; and, Carolyn Marshall, State Clerk.

FOREWORD

The commissioners of the Kossuth County Soil Conservation District (SCD) take this opportunity to express their appreciation to all who have contributed to the progress of the conservation of natural resources in Kossuth County.

The Kossuth S.C.D. is available to help land owners and users with solutions to their soil or resource management problems.

During the past year the Kossuth soil survey was published and distributed to the people of Kossuth County. This was a long awaited event. An up-to-date survey is invaluable in the most efficient and economic management of the soil.

The S.C.D., as an arm of state government under the Iowa Department of Soil Conservation, has memorandums of understanding or working agreements with many different government agencies and departments. One of these, the Soil Conservation Service (SCS), assists the district directly in day-to-day operations. Others, such as the Kossuth County Extension Service and Iowa Conservation Commission, assist as requested. The memorandums of understanding also provide district assistance to those who are a party to the memorandum.

The sources of personnel who serve the S.C.D. have changed some this year. Paul Ohland, District Conservationist, is employed by the SCS. Melela Shelman, Soil Conservation Technician employed by the SCS, transferred to Oskaloosa, Ia. Loren Bishop, Engineering Aide, is employed by the district through the Iowa Department of Soil Conservation. Carolyn Marshall, our clerk/secretary, is also employed through the Dept. of Soil Conservation. Bruce Logemann, Soil Conservation Aide, was hired by the district through the Dept. of Soil Cons. to replace Melela Shelman.

The SCD again made available an 8-row 30" and a 6-row 30" no-till planter for use by Kossuth County farmers. This program, which has been assisted by Revenue Sharing Funds from the Kossuth County Board of Supervisors, has allowed farmers to try the no-till form of conservation tillage on small areas without buying a planter until they have tried this method. In 1983 these planters were used by 9 people to plant 400 acres of corn and soybeans.

The Kossuth Soil Conservation District Commissioners meet on the fourth Tuesday of the month.

23,830 feet of terraces were constructed by Kossuth County landowners in 1983. Along with the terraces, 6,580 feet of water and sediment control basins were built to control the runoff of water and sediment. 661 acres of contour farming was started with the terraces by farmers improving their erosion control.

FINANCIAL STATEMENT

1-M ACCOUNT:	
Allocation received for F.Y. 82-83 ...	\$ 2,868.34
Disbursements	
Commissioners' Expenses	\$ 1,653.31
Office Supplies & Expenses	1,128.11
Printing Expenses	86.92
Total	\$ 2,868.34
3-M ACCOUNT:	
1982-83 allocation received	\$ 23,558.00
Funds paid out — terrace and grade stab. structure	- 17,397.45
Funds Obligated, practice not completed	- 6,160.55
Balance of unobligated funds	\$ 0.00
1983-84 allocation received	\$ 33,973.00
Funds paid out — terrace/waterway construction	- 18,261.74
Funds obligated, practice not completed	- 15,300.00
Balance of unobligated funds	\$ 411.26

The public is welcome to attend. Check with our office at 1306 N. Main St. regarding meeting time or call 295-5156.

The Commissioners of
Kossuth County Soil
Conservation District

TILLAGE REVOLUTION

During the past four years a tillage revolution has been taking place in Kossuth County. The moldboard plow is no longer king. Approximately 402,000 acres of corn and soybeans were planted in 1983. Of that, 242,000 acres or 60% was planted on land which had been chisel plowed, disced - field cultivated, no-till or ridge-till. In 1980 these types of tillage were used on only 18% or 93,000 acres of the land planted to corn and soybeans.

No-till farming has increased from 40 acres in 1980 to 4,000 acres in 1983.

Ridge-till farming is gaining interest rapidly in the county. In 1983 three people planted 1,113 acres and an additional nineteen built ridges for planting in 1984.

In 1984 there will be an opportunity to observe no-till or ridge-till in all parts of Kossuth County. There will be tours and meetings held to provide information about tillage methods.

In the fall of 1983 a ridge-till club was formed by farmers in Emmet, Kossuth and Palo Alto counties. The club provides the opportunity to compare notes with others on the use of ridge-till farming.

The Kossuth Soil Conservation District is again furnishing no-till planters for use by Kossuth County farmers in 1984. Arrangements can be made for use of these planters by contacting the Kossuth Soil Conservation District, 1306 N. Main St., Algona, or calling 295-5156.

CONSERVATION PROGRESS

One hundred sixty-six Kossuth County farmers reduced their wind and water erosion losses on 21,748 acres. Soil losses were reduced to less than 5 tons-per-acre-per year on 10,375 acres of land.

No-till and ridge-till farming was used on 5,113 acres in 1983. Approximately 242,000 acres of Kossuth County corn and soybeans were planted on land which had not been tilled with a moldboard plow.



DISTRICT COMMISSIONERS

(L to R) Robert Deal, commissioner; John Simpson, assistant commissioner; Kent Seely, commissioner; James F. Antoine, commissioner; Kenneth Brones, commissioner; John Ley, assistant commissioner; Wendell Christensen, chairman, commissioner.

An additional 208 landowners and users worked with the district staff in making plans for future conservation work.

Conservation plans were developed on 11,077 acres with landowners. These plans contained the conservation practices which were needed to reduce soil loss to a permissible level of 5 tons/acre/year or less. Conservation treatment measures used in the conservation plan included: conservation tillage, terraces, sediment and water control basins, contouring, crop rotations, field windbreaks, waterways, etc. In addition, 3,567 acres of conservation alternatives were furnished to landowners not yet ready to make the decision to reduce their soil losses below 5 tons/acre/year.

WIND EROSION

Many people say "Wind erosion just moves the soil around in the field". It also moves to fence rows, road ditches, farmsteads, houses, woodlands, drainage ditches, and pastures. In these locations, it may become a nuisance and isn't usable for crop production.

Present Kossuth County farming methods give a wind erosion potential of 6 tons-per-acre-per-year. Wind erosion levels depend on several factors, some which we can control and some which we can't.

Uncontrollable factors include: soil type, climate (including wind speed and direction) and soil and crop tolerance to soil movement. Controllable factors include: time and type of tillage, amount of residue left, roughness of the soil surface, and the distance which the wind can blow across the field without interference.

Different soils have different potentials of wind erosion. Palms Muck and Blue Earth mucky silt loam are our most wind erosive soils. When fall plowed, they have a 15/ton/acre/year wind erosion potential. Webster clay loam, Colo silty clay loam and several others have the lowest wind erosion potential of 4 tons/acre/year. Canisteo silty clay loam, the most extensive Kossuth County soil, has a wind erosion potential of 10 ton/acre/year when fall plowed.

The type and time of tillage governs how long the soil is bare and open to the action of the wind. With fall plowing, the wind can possibly blow the soil from plowing time in early to middle November to about July 1st when the crop is large enough to protect the soil. Eighty-eight percent of the wind which can cause wind erosion occur during this time. At the other end of the tillage scale, no-till, the soil surface is protected from wind erosion throughout the winter. Fall chisel plowing cornstalks can also provide residue protection through the winter months. Any fall tillage of soybean stubble destroys the erosion hindering residue cover.

