

ANNUAL REPORT

TAMA COUNTY
SOIL CONSERVATION
DISTRICT

1951

INTRODUCTION

Our District, for practical purposes, completed its tenth year of operation in 1951, even though the anniversary date is not until January 21, 1952. As a result a bit of reflection and review of those years undoubtedly is in order.

We believe one of the principal accomplishments during this period is that Soil Conservation has become generally accepted by the majority, as a vital program to a continued high producing agriculture. This fact is not peculiar to our District but it is a thing common to the nation. Districts cannot claim the entire credit but certainly they have had a definite part in bringing this about.

On the more tangible side during this period, our District has worked with about 12% of the farmers in development of Farm Conservation Plans. In addition we have aided about the same number with the establishment of individual practices. These nearly six hundred farmers give a fair indication that Soil Conservation is moving ahead. Certainly not as fast as most would like and yet with the democratic processes that District operation uses, it cannot be said we have not made some progress.

Leadership plays a very important part in the Districts Work. Men such as Robert Lyon, E. P. Skrabble, and Fred Bruene, must be commended for the efforts they put forth during the formative and early years of the District.

The year 1951 will probably be marked as a milestone year in the Districts operation. This is true, not only in ours, but all Districts. Efforts to consolidate the Conservation Work placed further responsibilities on the District, by calling on them to play increased roles in the U. S. Departments program at the county level. Prior to the directives our District had started a program of locating neighbor groups and developing them to the farm planning stage. However, the recommended changes in farm planning procedures that followed the directives led to dropping this effort. With the agencies that cooperate with our District, we believe a good Agriculture Resources Conservation Program was developed, and with all the agencies working together, we look for 1952 to be a progressive year.

PERSONNEL

Commissioners:

John F. Norton, Chairman
George Kos
Forrest E. Hill

Tama, Iowa
Toledo, Iowa
Dysart, Iowa

Soil Conservation Service

Frank P. Reed
Milburn E. Sevde
H. Howard Oak
Grace J. Bredimus

Work Unit Conservationist
Conservation Aid
District Conservationist
Work Group Clerk

District Employees:

Ruth Backen
Majorie Emerson
M. L. Kensinger
Keith McCord

Office Assistant (8 Mo)
Office Assistant (4 Mo)
Aid (2 Mo)
Aid (2 Mo)

Agriculture Extension Service

G. Gress Rogers
Stanley R. Stover

County Extension Director
Youth Assistant

Production and Marketing Administration County Committee

Alfred J. Brandt, Chairman
Fay E. Wilcox
Robert A. Malin

DISTRICT ACTIVITIES

Practice Establishment Demonstration

Working with the County PMA Committee, and Extension Service, two cooperating farms in the county were used as Conservation Practice Demonstration Farms. A Farm Plan was developed by the farmer with the District. Using the plan as a guide the PMA Committee approved practice payments on all practices the farmer could reasonably expect to carry on and complete during the year. Emphasis was placed on a balanced program and those practices the farmer could readily do with his own machinery and labor supply. Pasture Improvement and terracing were particularly stressed. In the fall a demonstration was held to show the results of the program. We hope to be able to carry this program further, for two reasons. First to show how the programs of the three agencies involved work together and, second, to encourage and show farmers how they can use and install those practices that we consider to be of a more permanent nature.

Goodyear Contest

The District took part in the Goodyear Tire and Rubber Company's contest for Districts and District Commissioners. We are sorry to have the Company discontinue this contest in our area, but believe this company is to be commended for their work in publicizing Soil Conservation Districts.

Seed Increase Plots

Thru the very fine cooperation of two farmers working with the District, we are attempting to establish two Birdsfoot Trefoil seed increase plots. A grant of sixty pounds of seed from the Soil Conservation Nursery enabled the District to inaugurate this work. A plot of approximately 4 acres was seeded on the Jack Norton farm this last spring. At the same time it was also planned to establish a plot of about 8 acres on the Erving Hagedorn farm, but the wet spring made a postponement necessary. The Norton plot had an excellent stand late in the fall of 1951. A second attempt will be made this spring to establish the Hagedorn plot.

DISTRICT ACTIVITIES

Forage Utilization

A forage utilization field day was sponsored jointly with the Marshall, Grundy, and Blackhawk Districts and the Farm Equipment dealers in the area. The event, held in June, highlighted the production of legume-grass silage and the use of surface silos. The County Agriculture Extension Directors, County PMA Committees, and Vocational Agriculture Departments collaborated with the sponsors in making this event a success.

Education in Public Schools

The third year in a three year series of Conservation Work Books is being used in the grade schools of the county. The books complete a cycle of conservation education, covering all phases of conservation. We hope to continue repeating the cycle of the same series in the same three grades. We have been aided materially by the County Superintendent of Schools and the Town School Superintendents along with the teachers. We are attaching to this report a copy of the work book for this year.

Radio Broadcasts

Weekly broadcasts about District activities have been carried on KREL Waterloo, Iowa, for the Blackhawk, Grundy, and Tama Districts during 1951. The broadcasts have included all the Commissioners, Farm Planners, and District Conservationist in a scheduled series.

Pasture Improvement

Cooperating with the Extension Service and PMA Committee the District is sponsoring a program to stimulate interest in Pasture Improvement. The prospects that Birdsfoot Trefoil offered have been instrumental in developing the interest we have so far been able to develop. A series of three meetings will be held during the winter months. The first of these meetings saw a turnout of more than fifty farmers. These men indicated they plan to renovate more than 300 acres this coming year. Securing adequate supplies of the Trefoil seed will undoubtedly be a problem.

COMMISSIONER MEETING ACTIVITIES

	<u>Number</u>	<u>Attendance</u>
Regular Meetings	12	35
Joint Meetings, 4 District	5	175
Joint Meetings, PMA Committee	7	124
Special Meetings	6	264

CONSERVATION EDUCATION ACTIVITIES

	<u>Number</u>	<u>Attendance</u>
News Stories	171	
Radio Broadcasts	14	
Work Books	612	
Veterans Classes	8	203
Demonstrations	2	1585
Training Schools	1	51
Tours	2	82
Interpret Meetings	3	12

CONSERVATION PRACTICES

	<u>1951</u>	<u>TO DATE</u>
Contour Cultivation (Acres)	2250	13039
Contour Strip Cropping (Acres)	16	401
Farm Ponds (Each)	2	13
Tree Planting (Acres)	9	18.5
Wildlife Area Improvement (Acres)	15	29.5
Terraces (Miles)	1.9	9.2
Farm Drainage (Acres)	72	415
Tile Drainage (Lin. Feet)	42,886	123,991
Open Drains (Miles)	0.3	4.1
Pasture Improvement (Acres)	7	83
Fence Row Management (Miles)	0.8	22
Creek Straightening (Lin. Feet)	3960	5460
Outlets and Watercourses (Miles)	0.7	1.7

PLANNING AND ASSISTANCE

	<u>1951</u>	<u>TO DATE</u>
Farm Conservation Plans (No.)	16	279
Applications Received (No.)	23	
Active Applications (No.)		12
Agriculture Conservation Program Participants (PMA) Assisted (No.)	492	

GROUP ACTIVITY

	<u>1951</u>	<u>TO DATE</u>
Neighbor Groups Located (No.)	3	3
Other Groups (No.)	1	16
Planning Meetings-Neighbor Groups	6	6

CONCLUSION

As a part of our 1951 District Report, we are including a copy of the Tama County Agricultural Resources Conservation Program. This program while probably not outstanding nor near the final answer, to us represents a pronounced step forward in Conservation in our County and District. It represents such a step to us because we will have closer cooperation with the agencies foremost in the field of conservation. We have had certain ties with these groups in the past as outlined in our Districts Program of Work. However, with the directives from the Secretary of Agriculture outlining areas of responsibilities along with suggested action, we believe this program with an honest effort by all concerned will result in an improved Conservation Program.

Districts have been commended many times because they are an example of democracy in action. Since democracy is exemplified by people working together we want to take this opportunity to thank the many fine people associated with the following groups who aided our District materially during the year just past.

U.S.D.A. Soil Conservation Service
Agriculture Extension Service
County PMA Committee

State Soil Conservation Committee
Conservation Commission

County Superintendent of Schools
Farm Bureau

Also to the many interested individuals who have helped to make the District operate successfully, we say thankyou.

To those who have an interest in the Tama County Soil Conservation District we respectfully submit this report.

TAMA COUNTY SOIL CONSERVATION DISTRICT
COMMISSIONERS

by John F. Norton Chairman
John F. Norton

TAMA COUNTY AGRICULTURE RESOURCES CONSERVATION PROGRAM

OBJECTIVE

Use each acre of Agriculture land within its capabilities and the treatment of each acre of land in accordance with its needs for protection and improvement.

General Information

Total Area in county	---	460,800 acres	
Total area in farms	---	446,600 acres	
Average growing season	---	147 days	
Average killing frost dates	---	May 6 and September 30	
Average annual rainfall	---	32.5 inches	
Average size farm	---	171.6 acres	
Owner-operated farms	---	50%	
Principal crops (1949)	---	Corn	- 138,500 acres
		Oats	- 75,400 acres
		Soybeans	- 18,800 acres
		Other Grains	- 1,600 acres
		Meadow Crops	- 102,200 acres
Types of farms			
Livestock Specialty	69%		308,200 acres
General	14%		62,400 acres
Cash Grain	11%		49,200 acres
Dairy	3%		13,400 acres
Other	3%		13,400 acres

Inventory

Tama County was soil mapped in detail in 1937 by the Soil Conservation Service and Division of Soil Survey: Bureau of Plant Industry both of USDA, and the Iowa Agriculture Experiment Station. At the same time the per cent of slope, degree of erosion and land use for each soil area was also mapped.

From erosion and slope surveys a summary for the county shows the following:

<u>Topography</u>	<u>% of Area</u>	<u>Acres</u>	<u>Erosion</u>
Level to undulating	9.5%	43,000	Slight
Undulating to rolling	32.6%	146,000	Moderate
Rolling to rough	26.5%	116,000	Serious
Rough to steep	16.3%	73,000	Severe
Bottomland	15.1%	68,000	

Based on three of the survey items mapped, (1) soil type, (2) % of slope, and (3) degree of erosion, five soil capability classes of land for use were developed. These are:

- Class I -- Suitable for cultivation without special practices
- Class II -- Suitable for cultivation with simple practices
- Class III -- Suitable for cultivation with intensive practices
- Class IV -- Suitable only for occasional cultivation
- Class V -- Not suitable for cultivation

(Note: It must be kept in mind that capabilities are not a guide to production but are guides to the hazards of soil erosion and soil fertility depletion from cultivation.)

With these classes as a basis a capability map for the entire county was prepared. Comparison of this map with land use at the time of mapping shows the following.

Land Use	% of Area	Total Acres	Acres in Five Classes				
			I	II	III	IV	V
Cropland	73.3	336,500	116,100	137,200	41,700	20,100	21,400
Pasture (Permanent)	18.1	83,100	32,700	22,100	7,100	7,300	13,900
Woodland	5.7	26,200	4,200	2,700	2,200	8,500	8,600
Idle	0.2	800	100	300	100	100	200
Totals	100.0	446,600	153,000	162,300	51,100	36,000	44,100

Taken from the soils and capability maps a summary for the county shows the following:

Soil Type and Area	Capability Class					Totals
	I	II	III	IV	V	
1. Upland Soils developed on Loess						
(a) Permeable						
(1) Dark Colored Garwin, Muscatine, Tama	69,472	97,231	21810	4558	2454	195,525
(2) Light Colored Downs, Fayette	592	12,335	17,433	17,284	22,437	70,081
(b) Slowly Permeable						
(1) Light Colored Traer			134			134
2. Upland Soils developed on Glacial						
(a) Permeable Till						
(1) Dark Colored Carrington	352	10,811	11,078	4,041	2,715	28,997

(b) Slowly Permeable							
(1) Dark Colored	40						
Shelby	40	32	410	987	1469		
(2) Light Colored							
Lindley		13	349	13,131	13,493		
(c) Very Porous							
(1) Dark Colored							
Thurman				495	495		
(2) Light Colored							
Chelsea				775	775		
3. Soils Developed on Terraces							
(a) Permeable							
(1) Dark Colored							
Buckner, Judson, Waukesha	22,419	1664	252	103	71	24,509	
(b) Slowly Permeable							
(1) Dark Colored							
Bremer, Chariton	1,750		338		3	2,091	
4. Soils Developed on alluvial Bottoms							
Cass, Kay, Sawmill, Wabash,							
Wabash-undifferentiated,							
Wabash-Judson	58,647	40,221		9,233	643	108,744	
5. Miscellaneous							
Rough broken areas					337	337	
Totals	153,232	162,302	51,090	35,978	44,048	446,650	

Problems

Soil Fertility maintenance (including Pastureland)	400,000 acres
Soil and water conservation practices (including rotations and drainage in relatively small upland areas)	360,000 acres
Flood Control and bottomland drainage	70,000 acres
Land Use adjustment (Principally in Fayette, Lindley Areas)	50,000 acres
Woodland Management and Establishment	10,000 acres

Solutions

Channell and Conservation and Soil Maintenance activities through Agriculture Resources Conservation Committee and follow plan of Action. This plan will be amended or added to as needs arise.

PLAN OF ACTION TAMA COUNTY IOWA AGRICULTURE RESOURCES COMMITTEE

REQUIREMENTS	OPERATION	FACILITIES
A. General Conservation Education		
1. Public	Furnish information relative to Conservation and program activities to all papers having circulation in county. Also to radio stations having widespread local coverage.	Extension aided by Resources Comm.
2. Schools	Supply Conservation Work Books for use of pupils in both rural and town schools.	District Commissioners, Co. Supt. of schools. Town Supts. aided by SCS.
3. Organizations	Furnish programs or program material for civic, fraternal, religious, and similar organizations.	Extension aided by Resources Comm.
B. Conservation Leaders		
1. Neighbor Group	Locate and encourage to initiate conservation activities leading to farm plans. Training in county wide leader training program.	District Commissioners and Extension aided by SCS.
2. Community Committeemen	Lead in widespread use of Conservation practices approved in ACP docket. Will participate in county wide leader training.	PMA aided by Extension and SCS
3. Other		
a. Farm Organization	Leaders and elected officials will be informed of program. Selected members to participate in leader training.	Extension aided by Resources Comm.

b. Vocational Agriculture and
G.I. Class Instruction.

Will encourage and bring conservation
program to classes. Asked to take
part in leader training.

Extension aided by Resources
Committee

c. Farm Managers

Encourage managers to emphasize
Conservation needs to clients and
operator.

SCS and PMA

C. Supporting Conservation Practices

1. Mechanical

- a. Terraces
- b. Contouring
- c. Strip Cropping
- d. Open drainage ditches
- e. Tile Drainage
- f. Dams for Livestock Water
- g. Grassed Waterways.

Thru education programs show need
for widespread adoption of practices
for soil and water conservation.

Will be in ACP docket for program
participants.

Education Extension aided by
Resources Committee

For ACP

PMA Will--

1. Determine needs for practices
as requested by participants.
2. Determine amounts allowed
for participants
3. Determine eligibility and
certify payments to
participants.
4. Furnish layout assistance
as needed and available to be
technically supervised by SCS
5. Furnish SCS list of partici-
pants and amounts of approved
practices.

SCS Will

1. Determine contemplated
practices are practical and
fit long time program.
2. Do lay out or supervise
assigned aids to do layout.
3. Supervise installations,
informing.
4. Certify acceptable performance
5. Train ACP personnel placed at
disposal for layout work

2. Vegetative Practices

- a. Buffer strips
- b. Grass Headlands

Same as for mechanical
practices.

Sames as for mechanical practices.

D. Soil Fertility Maintenance Practices.

1. Limestone

Thru educational and AC programs show need for limestone. Application will be based on soil tests

Education-Extension aided by Resources Committee
ACP -PMA in charge Soil tests required to show need. Interpretation by Extension aided by SCS

2. Fertilizers

a. Commercial

Thru education and AC programs show needs. Applications should be based on soil tests

Education-Extension aided by Resources Committee
ACP -PMA in charge Soil Tests urged to show need. Interpretation by Extension aided by SCS

b. Animal Manures

Thru education show need for care in handling and value

Extension aided by Resources Comm.

c. Green Manures

Thru education show need for and crops adopted

Extension aided by Resources Comm.

3. Crop Residues

Thru education show value in maintaining soil fertility

Extension aided by Resources Comm.

4. Crop Rotations

Thru education and Farm planning show need for rotations in soil fertility. maintenance. Rotations based on soil capabilities and supporting practices

Extension and SCS

E. Land Use Practices

1. Pasture

a. Permanent

1. Establishment

Thru education and AC Program show need for treatment and recommended seedings. Will be based on soil capabilities

Education - Extension aided by Resources Comm.
AC Program - PMA
Soil tests required for Lime
Soil tests suggested for Fert.
Seeding Mixtures from Pocket

2. Renovation

Thru education and AC Program show need for improvement using recommended fertilization and seeding.

Education - Extension aided by Resources Comm.
AC Program - PMA
As for E-1-A-1

2. Woodland

a. Tree Planting

Thru education and AC Program show need for and use of plantings. Will be based on soil capabilities.

Education - Extension aided by Resources Comm.
AC Program - PMA
Species, rates of planting, and protection from docket.

b. Stand Improvement and Management

Thru education and AC Program show need for proper improvement and management practices.

Education - Extension aided by Resources Comm.
AC Program - PMA
Practices as recommended from docket.

3. Wildlife

a. Plantings

Thru education show need for plantings. To be recommended on adapted areas, and based on soil capabilities.

State Cons. Comm. Officer aided by Dist. Comm. Local Game Clubs and SCS.

b. Protection

Thru education show need for wildlife protection and resulting benefits.

State Cons. Comm. Officer aided by Dist. Comm. Local Game Clubs and SCS.

F. Farm Soil and Water Conservation Plans

1. Initial

Individual farmers requesting aid with ACP practices to be asked to become Soil Conservation District Cooperators by signing Initial Plan. Initial Plan to be a start towards a complete or basic plan.

PMA aided by Resources Comm.

2. Basic

a. Group

Natural neighbor or small community groups that are working on initial plans or are otherwise interested will be asked to develop and apply plans. Will include all necessary practices.

Group Organization - District Comm. aided by Extension and SCS
Farm Planning - SCS

b. Individual	Develope farm plans with individuals as outlined in F-1-2-a particularly in areas where plan will be used as demonstration. Will be limited	Farm Planning -- SCS
G. Crop Production & Cultural Practices		
1. Crops		
a. New & Improved Varieties		
1. Grains	Thru education bring information relative to new and improved varities Supervise activities for seed increase plots and variety tests.	Extension aided by Resources Comm.
2. Forages	Thru education bring information relative to new and improved varities. Supervise activities for seed increase plots and variety tests.	Education- Extension aided by Resources Committee Seed Increase- Dist. Commissioners aided by Resources Comm.
b. Harvesting	Thru education furnish information on most practical seed and forage harvesting practices	Extension aided by Resources Comm.
c. Securing Stands		
1. Seeding rates	Thru education furnish information on rates to insure economical stands of grains and forages	Extension aided by Resources Comm.
2. Methods	Thru education furnish information on methods to insure economical stands	Extension aided by Resources Comm.
2. Weed Control		
a. Mechanical	Thru education show need for weed control and mechanical control method	Extension aided by Resources Comm.
b. Chemical	Thru education show need for chemical control methods and types of chemical to use.	Co. Weed Commissioner and Extension aided by Resources Committee

H. Economics

1. Tenure

a. Leases

Thru education furnish information on improved types of leases, particularly those leading to improved land use.

Extension aided by Resources Comm.

2. Crop Storage

Thru education furnish information on storage, storage buildings, loans, and storage loans.

Storage Loans PMA
Storage Building Loans -PMA FFA
Storage Building plans- Extension
PMA

3. Finances

Thru education furnish information on all types of loans available for farm enterprise financing.

FHA, PCA, NFIA aided by
Resources Committee

4. Equipment

Conduct surveys to determine needs and availability of farm equipment and materials for Harvest

Mobilization Committee

5. Labor

Thru education make known approved labor saving methods. Assist in locating and placing farm labor.

Extension aided by
Mobilization Committee