

NEW PATTERNS

in the Good Earth



EIGHTH ANNUAL REPORT



MILLS COUNTY, IOWA
SOIL CONSERVATION
DISTRICT

DECEMBER 31, 1948

Recommended Reading

Of special interest is the copy of "Forage Notes" which is enclosed and which will be helpful to all interested in better land use.



Our Cover Picture

The color photo shown on the cover of this report is remarkable from two standpoints. The subject matter is unusual in that the farm shown, which belongs to Bert Wheeler and lies in south central Mills County, has a full 16 miles of terraces on its 240 acres, all of them completed in the last three years. This also is probably the first color process picture ever shown on such a report.

The cartoon on the back of the report is one of a series of eight done by the Mills County District's Felix Summers, which have been made into newspaper mats by the SCS and distributed nationally to encourage conservation interest.

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District Commissioners



J. F. Wearin, Jr., Chairman
Hastings, Iowa

J. M. Steele
Malvern, Iowa

D. N. McGrew
Emerson, Iowa

E. W. Burdic, Secretary
Malvern, Iowa

T. J. Powell, District Conservationist
Shenandoah, Iowa

A S S I S T E D B Y

Ray W. Jones, Soil Conservationist

Felix D. Summers, Conservation Aid

B. Jack Wederquist, Conservation Aid

New Patterns in the Good Earth



We, the Commissioners of the Mills County Soil Conservation District, respectfully submit this report of our activities and accomplishments during 1948, to the people of the district and to the assisting agencies. As in past years it has been the policy of the commissioners to so direct the operations of the district that as much conservation be put on the land as possible.

A look at the record shown in the summary at the end of the report will show just how well we have succeeded in following that policy. A review of the year's work shows that at the same time we have been doing our regular job, a few innovations in running a district have been brought about. The pictorial nature of this report is a direct result of the most outstanding of these innovations; namely, the taking of aerial photographs by Ray W. Jones with the district's own aerial camera.

Last winter we decided that aerial pictures would show a great deal about the need for and the benefits to be derived from conservation farming to the people of the county, especially if they were of local scenes. We purchased a war surplus aerial camera for \$109.00 and Ray W. Jones agreed to take the pictures from the air. Commissioner Steele, being a photography expert, assisted Jones with technical advice in preparation for picture taking and in developing and printing at various times during the year.

Much credit must go to these two men for the success of the venture, since they worked many hours of their own time on it. We have a very interesting and educational file of pictures as a result of this first year's operation. They have been shown at many places where the public in general could see them, and in a great many instances use has been made of them to help solve various problems that have arisen on individual farms on which the technicians have been working. With the ex-

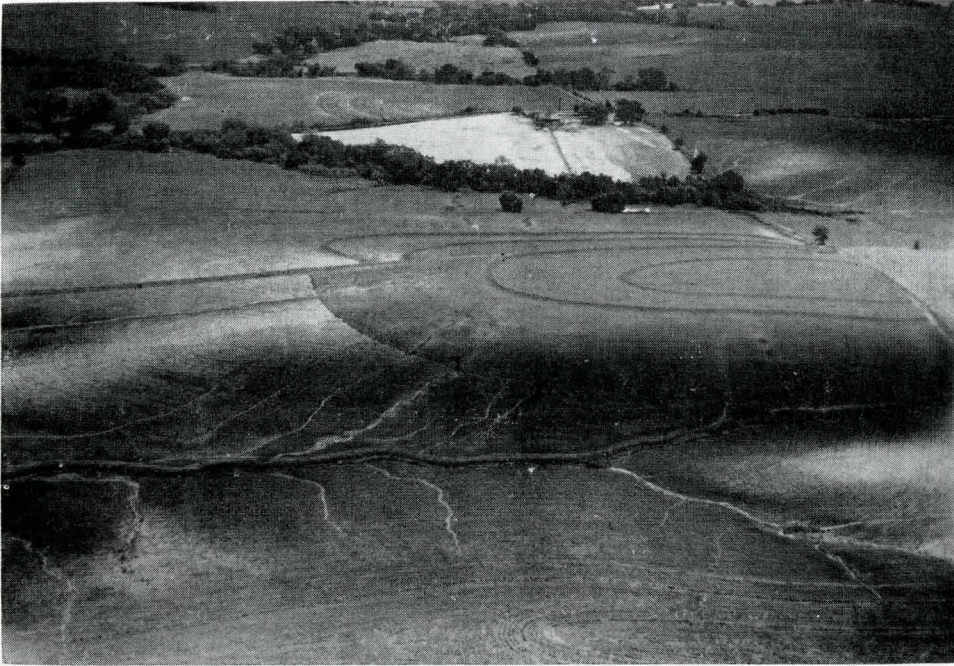
ception of the 1938 or "before" picture of the Nishna river valley, all of the pictures in this report were taken by Ray W. Jones, from the air.

Another new idea of ours was for the district to employ with its own funds, a very capable part time office assistant. This has been included in and is considered a part of the service charge program we began mid-year in 1947. We began this program last year because of the fact that the National budget for conservation was not increased as fast as new districts were formed. Although the dollar value of the budget remained the same, nearly a third more new districts were formed, hence the amount for each district was reduced.

By instituting this program we were able to have nearly the same amount of help, both in the field and in the office that we had had before the cut. It has permitted us to have the office open regularly every week day morning and at the same time free the technicians assigned to the district from much clerical work. Both of these facts have maintained the efficiency with which we have been able to get conservation on the land. The expense of this program has almost been met by the service charges which have been made for layout work.

In other words, the service charges collected have paid the men working on actual lay-out work as rod men and part of the office assistant's salary. Our policy, as stated at the beginning of the year, has been to hire as much help as we could effectively use in field work. The service charges paid by the farmers, who have had work done, have made it possible for the technicians to get around to many more farms in the course of the year than otherwise would have been possible.

We like to think that people in general rather like to help themselves, for we have had no complaints about the cost of this program and we have no difficulty in collecting our accounts. The financial report of the service charge program as set out at the end of the report will be of interest. You will note there that this truly is a service charge, in that the funds received were all spent on expenses incurred in rendering the service.



The gullies below will soon be eliminated by the terracing above
— the start of a good (and badly needed) conservation plan.

For the past year and a half we have had the loan of a TD-18 tractor and bulldozer from the Soil Conservation Service. We have followed the policy of leasing the tractor to conservation contractors for use on conservation work in this county only. To date this has been a good source of revenue for the district, as it has been in use most all of the time since we have had it. We have tried to handle the machine in a business like manner; and at this time we have a satisfactory reserve of funds in the bank for maintenance of the tractor and the tractor is still in good mechanical condition.

As in all reports, it is necessary to state the accomplishments for the year. Aside from taking pictures, which was an extra curricular activity for Mr. Jones, we

have managed to increase the amount of conservation on the land to a considerable extent. Since a detailed summary is included at the end of the report, we will only mention the highlights here.

It is interesting to note that during the year the one-thousandth mile of terrace was laid out and constructed in the county. In fact, we now have a total of 1062.3 miles of terraces in Mills County, which is 16.5% of all the terraces built in Iowa to date. These terraces are on 180 planned farms and 349 farms with active applications and starting practices which cover a total of 109,117 acres. This comprises 23% of the farms in the county and 29% of the land in the county.

There has been an increase in the number of acres of bottom land drained and nearly two and one-half times as many acres of cropland that have had limestone spread on them than in the preceding year. During the year 32 farm plans were written. With present personnel this seems to be about the number which we can expect, as that is the number written last year too.

As in last year's report we compare the continuation of interest in conservation by comparing the number of applications on hand at the beginning and at the end of the year. At the beginning of 1948 there were 149 applications on file with 163 at the year's end. Thus when we consider that 32 plans were written from the list as of the beginning of the year; there were 46 new applications for assistance made to the district during the year. This is a healthy amount of interest, and one which we well need here in this county when it is possible to take a picture, such as the badly eroded shot in the center of this report, in Mills County in 1948.

One of the more outstanding events of the year in which we participated was in cooperation with the County Superintendent of Schools and her rural teachers. The district helped make the arrangements for a tour to the Soil Conservation Experimental Farm near Clarinda by a number of the country school teachers. D. N. McGrew accompanied this group to the farm and



Man's geometric patterns are discarded for nature's texture.
(Straight lines go against the grain).

he was much impressed with their intelligent interest in what was shown them there. It is encouraging that Miss Amy Hammers continues her interest in acquainting school children with the importance of conserving soil. This program of hers, which she has worked on for several years, is one which we commissioners feel certain is of great benefit to the future of the county. It will be easier for the next generation of farmers to accept the need for careful soil management as a result of the seeds of truth planted in grade school today.

As in the past we have had the best of cooperation with the P.M.A. here in the county. That agency has again based its payment program on the more important phases of our program. They also insist that all work must be up to our specifications before any payments



Strip mining is not confined to minerals. Do y



ou wonder what unborn generations will say?

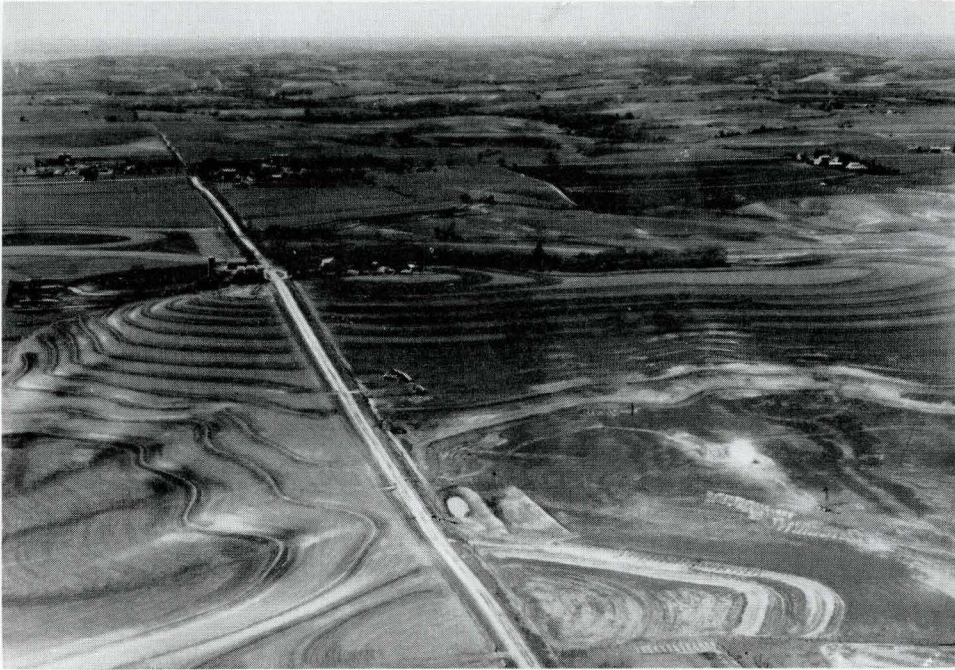
are made. This excellent cooperation has continued to make it possible for us to maintain our standards of performance on certain practices, such as terracing, where quality standards are of vital importance. We know that a terrace that does not meet certain minimum requirements as to size and water-holding capacity is worse than no terrace at all. Hence, we feel that this cooperation is not only of importance to both agencies involved, but it also works to the benefit of the land and farmers in the county.

The Mills County Board of Supervisors has been quite cooperative this year. In order to maintain a drainage tube through a county road the County, with our cooperation, built one and two-tenths miles of terraces on the farm above. By so doing they were able to keep a tube in place which had only one-eighth as much capacity as the one which had washed out. We are glad that we were thus able to help the county solve a difficult problem; and it is to be regretted that such cooperation has not been worked out with the state highway commission on farm to market roads.

This year J. M. Steele was our delegate to the annual short course at Ames, sponsored by the Mississippi Valley Association. As in previous years the information garnered there has been of considerable value to the district commissioners.

In this same regard we also wish to express our thanks and appreciation to the various conservation contractors who have worked in the county and have so ably cooperated in maintaining the specifications the district has recommended on all such work. Since there have been quite a number of contractors at work in the county this cooperation has been especially helpful. Here again it is to the benefit of all concerned that quality jobs be done.

It is regrettable that it is possible to take a picture such as the one in the center of this report. We include it here, however, as an example of why we have a Conservation District, and as a reminder to all of our readers of what may be expected of the future if we do not

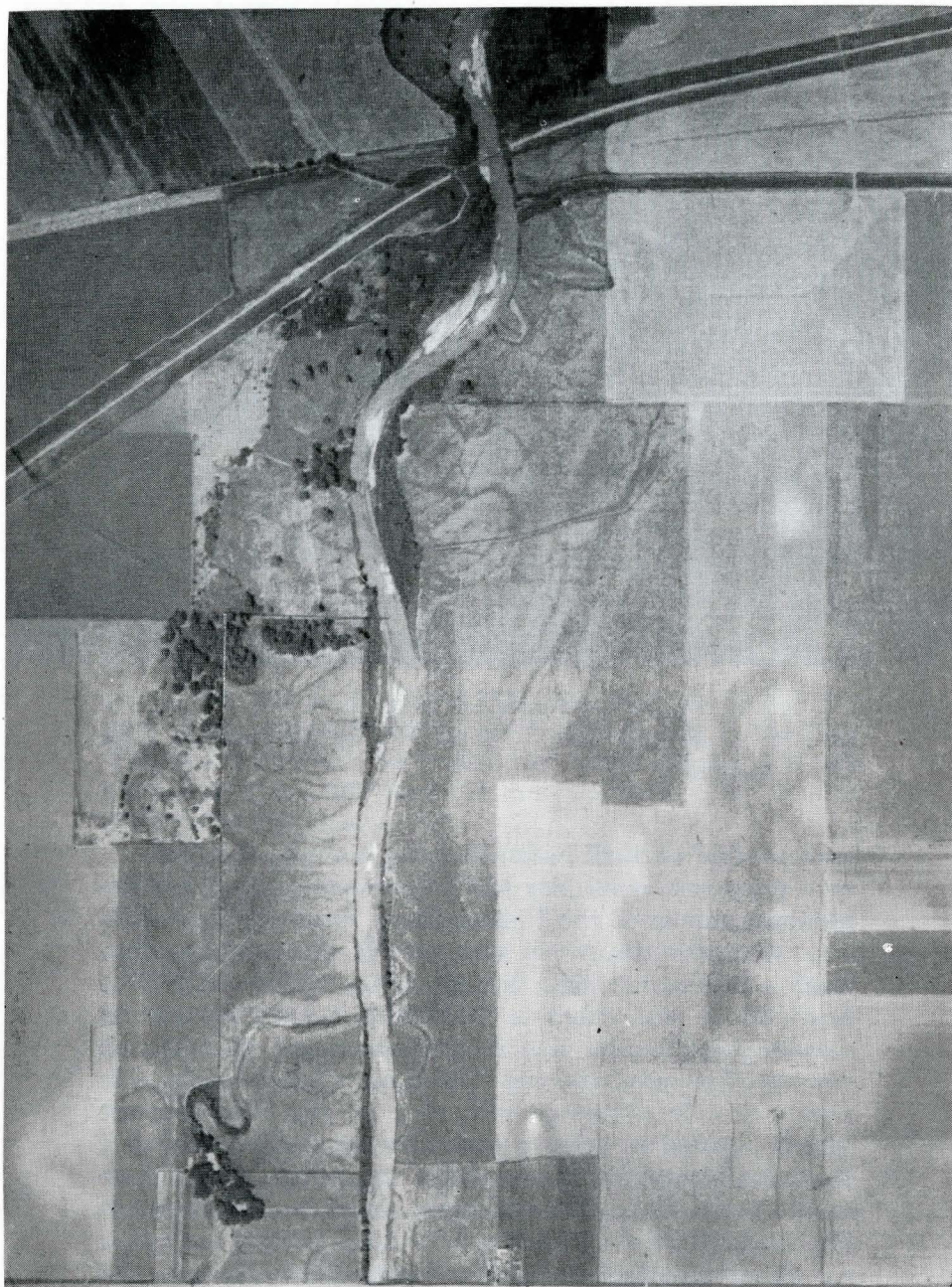


This is the first Iowa state institution farm to come under a complete conservation plan — an air view of the Glenwood State School farmlands.

take care of our soil better than we have in the past.

We want especially to bring attention to the companion pictures of the Nishna River Valley. The view is of a section of the river immediately south of the Burlington railroad bridge in Indian Creek township. The first picture was taken in 1938 at the time the county was mapped for the A.A.A. and was taken from a high altitude for map making purposes. Consequently, the perspective is different from that of the other picture which was taken from a much lower altitude in 1948. However, from the two pictures it is quite easy to see what changes have been made in the course of the river bed in the past ten years.

The river was straightened some 30 years ago and



The Nishna Botna in 1938



At the left is a picture taken in 1938 of the West Nishnabotna river south of the Burlington railroad. Above is the same river, taken in 1948. Besides the direct loss of 69 acres of high fertility land in the short mile and a half length shown, a new bridge to replace the old, which was washed out in 1947, will have a 290-foot span, compared to the 180-foot span needed before.

it had not done much meandering from the new channel up to ten years ago. In the past decade, however, it has literally gone wild, returning in some cases almost to its original, unstraightened course. Some 69 acres have entirely disappeared in a distance of $1\frac{1}{2}$ miles. While the old Bluegrass road bridge had a span of 180 feet, the new one will have to be 290 feet long.

Here is erosion in a very difficult form, caused by unbridled floods, the control of which is far beyond the scope of any one Conservation District or Drainage Dis-

trict. There should be a method of concerted action up and down the length of the entire Nishna watershed on the part of local people and groups of people to get this thing under control and to stabilize this stream bed. Floods such as those of 1947 and that of February 1948 are too costly and the effects too long lasting to go unanswered. We think that our program for holding the rain drops where they fall is the ultimate answer to the problem.

By J. F. WEARIN, JR.
Chairman, District Commissioners

January 17, 1949

The signing of this Annual Report was authorized by a resolution of the District Commissioners, adopted at the regular meeting on January 17, 1949.

By E. W. BURDIC
Secretary, District Commissioners

Summary of Work Accomplished

Item	1948	Total to Date
Number of farms with conservation plans -----	32	180
Acres -----	7,830	40,151
Number of farms with starting practices and active applications -----	163	349
Acres -----	28,482	68,966
Amendments to existing plans -----	0	35
Acres -----	0	7,099
Contouring supervised, Acres -----	3,875	50,175
Terraces laid out and constructed, Miles -----	231.8	1,062.3
Drainage, surveyed and constructed, Acres -----	1,360	5,851
Lin. ft. -----	23,760	166,794
Sod Waterways, laid out and constructed, Lin. ft. -----	94,842	274,362
Diversion terraces laid out and constructed — Lin. ft. -----	19,536	44,051
Lime applied to Cropland — Acres -----	4,754	12,502
Tons -----	10,458	27,503
Group demonstrations on farms, Number -----	5	97
Attendance -----	41	560
Conservation Information meetings, No. -----	10	101
Attendance -----	363	5,399
News articles released -----	30	158
Commissioners meetings -----	11	65

S U M M A R Y**RECEIPTS**

Terrace	\$1,091.95
Drainage	330.00
Other	160.82
Total	\$1,582.77

DISBURSEMENTS

Field	\$1,179.80
Office	766.00
Total	\$1,945.80

Balance on hand	
Jan. 1, 1948	\$4,361.75
Service Charge	1,582.77
T-D Tractor	3,469.00
Misc.	193.06
Total	\$9,606.59

TD-18 Tractor	\$1,227.34
Labor	1,945.80
Misc.	1,343.92
Total	\$4,517.06
Bal. Dec. 31,	
1948	\$5,089.53

S U M M A R Y O F W O R K L O A D

	Amount on Application	Can be Accomplished with Present Staff
Terraces	525 miles	139 miles
Diversions	4 miles	1.5 miles
Farm Watercourses	40 miles	8 miles
Field Boundaries	7200 rods	1600 rods
Other Practices	742 man-days	204 man-days

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TAKE OFF THE TOP SOIL AND YOU RAISE THE DEVIL!