DAKOTA ZEPHYR

JULY, 1935 VOL. 1 NUMBER 2

8'34

SOIL CONSERVATION SERVICE

U S

DEPARTMENT OF AGRICULTURE

PROJECT Nº 33, HURON, S. DAK.

Price 10¢

EMERGENCY CONSERVATION WORK CAMPS

Under The Supervision of the Soil Conservation Service

H. J. Clemmer, Regional Director.

NORTH DAKOTA

Wishek	SCS-1	Construction of earth fill and rubble masonry dams for water conservation.
New England	SCS-2	" " " " " " " "
Valley City	SCS-3	" " " " " " " "
Park River	SCS-4	" " " " " " " "
Mandan	SCS-5	" " " " " " " "
Lakota	SCS-6	" " " " " " " "
Watford City	SCS-7	" " " " " " " "

SOUTH DAKOTA

Chamberlain	SCS-1	Construction of earth fill dam for water conservation.
Presho	SCS-2	Construction of earth fill and rubble masonry dams for water conservation.
Alcestor	SCS-3	Gully control and terracing.

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"R A D I O"

Thursday at 1:15 P. M. over KGDY, Huron, South Dakota
Saturday at 12:45 P. M. over KFDY, State College, Brookings, S. Dakota

Each week, programs concerning soil saving and soil improvement are presented by members of the Soil Conservation Staff.

It is through the courtesy of the "Voice of South Dakota in Huron" and of South Dakota State College that these programs come to you.

You are invited to listen and to address your questions and comments to the Soil Conservation Service, United States Department of Agriculture, Huron, South Dakota.

THE DAKOTA ZEPHYR

Published Monthly
For the Benefit of Soil Conservation Cooperators
By the Staff of Soil Conservation Project No. 33
United States Department of Agriculture
Huron, South Dakota
H. J. Clemmer, Regional Director

Editor: J. G. Hutton Contributors: Members of the Staff

Volume 1. July 1935 No. 2

Greetings, Cooperators and Friends! Here is your July "Zephyr". Perhaps you will keep it along with the first number, for the information set down on these few pages may be of some value, at least, we hope it may be.

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The only thing which stands between humanity and starvation and nakedness is the thin layer of fertile top-soil. This layer has been estimated to be not more than nine inches in depth on the average in the United States. That is a very thin wall between us and the forces which can exterminate the human race. Save the top-soil.

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While erosion control programs are intended to stop the removal of soil from farms by the wind or running water, it should not be forgotten that if control methods are to be effective a long time program of soil improvement must be followed in order that the effects of soil wear through the removal of crops for many years may be offset.

The question is frequently asked as to why a fair proportion of all farm land should be regularly in a legume crop. The answer is that legume crops like clover, alfalfa, and sweet clover are the only crops that can do anything to increase the plant food supply in the soil.

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Experiment station data show that if straw and stalks are to be digested in the soil, some organic matter high in nitrogen must be present, otherwise, the yield of the crop growing on the soil will be depressed. This is, no doubt, one of the reasons why farmers have not favored plowing under straw and stalks.

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The growth of legume crops regularly in a crop rotation stabilizes farming systems, furnishes hay, pasture, and seed. If a sufficient acreage of legumes is grown, a perpetual nitrogen supply will be insured, provided that the legume crop is either plowed under or fed to livestock and the manure plowed under. The organic matter supply in the soil will also be insured. The injury done to soils by a half century of soil robbing must be offset by rational rotations if the erosion control program is to be effective.

J. G. H.

THE CHANGING SOIL

Probably the most difficult problem the Agronomist has to cope with is the doubt which many of our practical farmers have of the necessity of soil conservation work. For example, one farmer recently told me that he had no erosion problem because he now had a crop growing on land that had blown, and with average rainfall, he could control soil blowing. He did not foresee that unless he planned ahead, there would be periods in future years when parts or all of his fields would be bare, and blowing again, rapidly depleting the soil of its life sustaining plant food and humus.

Research has shown that South Dakota soils when cropped continuously without returning anything to the soil will depreciate in nitrogen content about one per cent each year. Therefore, in the short course of one hundred years from the date the soil is broken up, the soil will be past the stage of profitable production unless expensive steps are taken to replenish it. It, therefore, remains that Beadle County soils are 20 to 40 per cent lower in nitrogen than they were at the time they were broken.

One can understand why some farmers believe soil conservation work is unnecessary when it is realized that farmers in most cases have lived on a particular piece of land over a long period of years, and the soil changes are relatively so slow when measured in terms of a few years that the occupant is prone not to notice the great depreciation of this land which is our best natural resource. This is particularly true when other factors such as more timely and abundant rainfall occasionally enter to produce a good crop, causing one to minimize the poor yields of previous years. Such a condition is very likely to occur this year. Some of the soil has not produced a crop for two or three years due to extreme drought. During this time, some plant food has been made available in the soil. With the advent of plenteous spring rains, we have promise of a good crop which will use the plant food made available last year as well as that made available this year. Subsequent crops will remove the reserve of available plant food after which crop yields will decline.

Van Loop, that eminent authority on historical and practical geography, has this to say about soil erosion: "Fortunately, this problem of practical importance, namely, soil conservation, has penetrated to the consciousness of government people. No government today would permit such scandalous interference with the soil, as had been our custom, and upon which all of us depend for our living."

We have only to look at recent history to find evidence of soil exploitation. The Romans were first rate exploiters who in less than five generations changed the entire climate of their peninsula and still they were called practical farmers of their day. The Spaniards did the same to some of our South American fields after the patient little Indians had labored for centuries to protect this soil. These are only two of numerous instances which have been brought to our attention. The fact is obvious that when left to herself, nature is in no particular hurry to change the facial features of old Mother Earth. But aided and abetted by man, she proves to be an uncomfortably fast worker. The sooner we realize that we are only the custodians of our soil for the period of one short lifetime, after which our children and their children must make a comfortable living from this selfsame soil, then and then only will begin to fulfill the obligation which is surely and definitely ours.

Leland M. Sloan -- Assistant Agronomist.

* *

HAS IT EVER OCCURRED TO YOU?

1. That the surface layer of the soil is the richest and most valuable part of the land?

2. That each acre of surface soil to a depth of six inches contains over 4,000 pounds of nitrogen?

3. That this plant food element when bought in the open market as fertilizer would cost over $400. per acre?

4. That many of our lands have lost from two to twelve inches of surface soil due to the blowing of the wind?

   This means that we have actually allowed the wind to blow away plant food to the value of from $35. to $800. per acre.

It is the business of the Soil Conservation Service to cooperate with farmers on this Project to accomplish just these things. An earnest invitation is extended to every farmer in the area of the Project to cooperate with the Service and with his fellow farmers in this community enterprise.

Paul Emerson
Chief Soil Expert.

THE MECHANICAL CONTROL OF DRIFTING SOILS

H. E. Engstrom--Chief Agricultural Engineer.

In spite of the relatively heavy rainfall in Beadle County this spring, many fields have continued to blow, thus disproving the idea that "When it rains again, our fields will all stop blowing." In fact, it is observed that many fields continued to blow within twenty-four hours after a soaking rain.

In a number of local areas, particularly north of Wolsey and northwest of Cavour on some farms, it was necessary to seed small grain three or four times before a reasonably satisfactory stand could be obtained. In several areas, a stand could not be obtained at all using ordinary methods and it became necessary to resort to a purely mechanical method of control to stop the blowing fields.

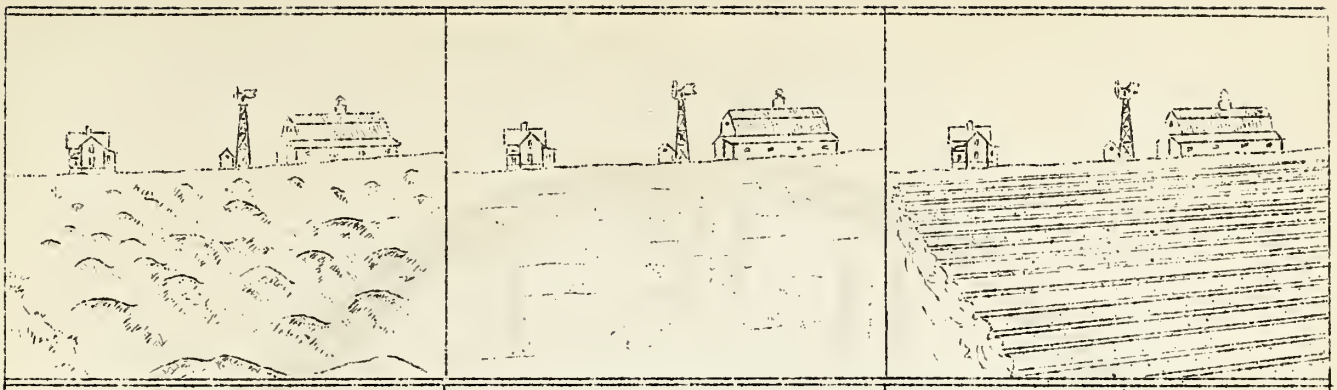
The Soil Conservation Service put its tractors to work leveling the hummocks and badly drifted fence lines where those blowing fields were doing a great deal of damage to adjacent fields which were not blowing. After the badly drifted and hummocky fields were leveled with a blade, oats was broadcast and the field deep listed. This operation left these constantly blowing and hummocky fields in a uniformly roughened condition and gave the oats an opportunity to establish an emergency cover crop.

During the month of June and the first week of July, approximately 960 acres of drifting, hummocky fields were leveled and listed, which effectively stopped the shifting of the soil on these fields. Operations of this character, though costly, will, under average conditions, do permanent good but they should be considered more as a temporary substitute for control by vegetative covering. Where a vegetative covering, meaning ordinary small grain crops, forage crops or tame grasses can not be obtained by ordinary farming practice, mechanical methods must, of course, be resorted to. In no case should tillage operations for erosion control be continued after an opportunity arises to start either a regular crop or an emergency cover crop. It is not intended here to minimize the importance of mechanical control, but one should not rely unnecessarily on such a method.

The vegetation once established on a wind eroded field should be maintained. Leave the crop residue, stalks or stubble standing high on the field through the fall and winter and until such time in the spring as there is sufficient moisture in the soil to insure a new crop..

Organic matter in the top soil serves to hold it from blowing. The most important advantages of vegetative control, as compared to mechanical control, are that a vegetative covering gives better and more permanent protection, adds more organic matter to the soil, increases the soil fertility, and keeps up the rate of moisture absorption to a greater degree.

On badly wind eroded fields, the following procedure has been followed with success:



H.V.W.

FIRST STEPS

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Many fields in the project area are so rough owing to the formation of soil drifts by the wind that it is impossible to use farm machinery for seed bed preparation or seeding until the surface has been leveled. After leveling has been finished, the soil will move again with the wind unless precautions are taken to prevent it.

Fields with soil accumulations like those shown in the first sketch are leveled by the use of a caterpillar tractor and a large blade, the accumulated soil being spread out until it is possible to cultivate the field. The middle sketch shows the results of such leveling.

After the field is leveled, a lister is used to furrow the field and leave a uniformly roughened surface to impede the velocity of the wind so that it is unable to move the soil. The right-hand sketch shows the field after listing.

Corn or cane may be planted in the listed furrows. These crops will furnish protection to the soil during the summer and the following winter. In several instances, oats has been seeded before listing and has furnished a good crop cover. Rye will probably do much better for late seeding as it will live over winter.

On most soils, listing will be necessary only until a crop rotation giving year-around protection is installed, or a permanent grass cover is established. On sandier soils, it may be necessary to use the lister whenever corn or cane is planted.

Listing is, no doubt, the most expensive method of roughening the soil, but it is, in many cases, also the most efficient. It is the only method to use where soils drift badly. On some of the heavier soils, successful roughening has been accomplished by using a properly adjusted cultivator.

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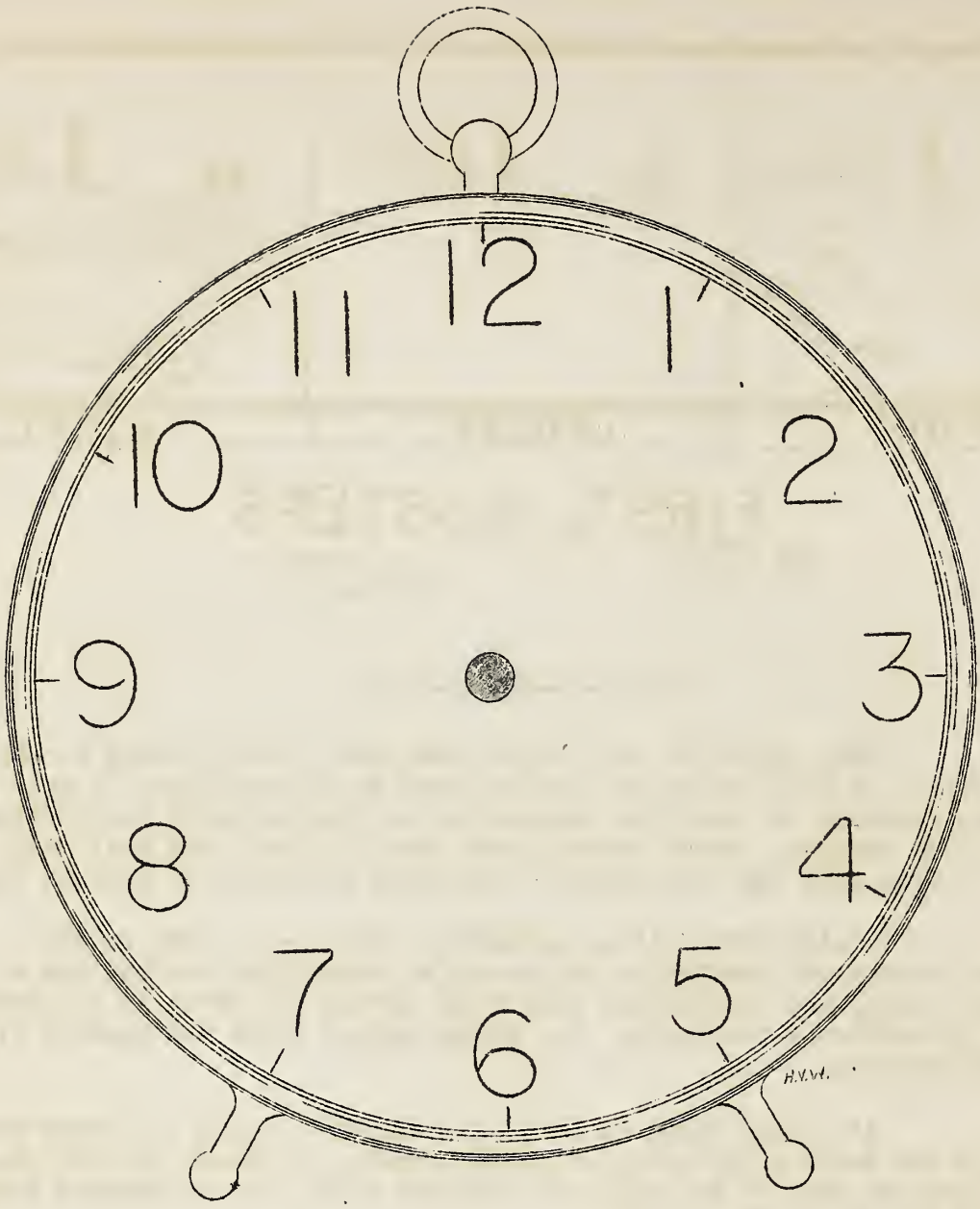

WHAT TIME IS IT?

A clock without hands is like a farm without business records. It continues to operate but it does not render its full service.

Telling the time of day by the clock without hands is a very difficult task. The same is true of trying to increase the income from a farm without a good business record.

Enterprises are only valued as a part of the farm business when they yield a return above feed, labor, and miscellaneous costs. Without a business record which shows what the return from each enterprise is, the farmer is as helpless as the farm wife would be trying to have dinner at Noon when the kitchen clock had been robbed of its hands.

Efficiency is the slogan of the day. Continuous testing of enterprises by the returns they give will result in increased efficiency and a higher net farm income.

I. N. Chapman
Chief Conservationist in Farm Management.

TREE PLANTING ON COOPERATORS' FARMS

By

A. C. Fox, Assistant Forester.

The program of soil conservation developed by the Soil Conservation Service in cooperation with farmers of the area and now in operation on their farms is giving farm practice a definite constructive trend. Every change in methods that has been agreed upon has as its ultimate goal the restoration of the farmer's original heritage - a fertile, productive, manageable piece of God's green earth.

To supplement the cultural and tillage methods advocated as a means of stopping wind erosion where desired the service will plant shelterbelts and windbreaks on cooperators' farms. Trees planted now will within a few years under normal conditions and with reasonable care produce barriers of sufficient magnitude to reduce greatly damaging effect of wintry blizzards and the blast of hot, dust-laden winds of summer.

Experiments in the Great Plains show that a windbreak has an influence for a horizontal distance equal to 20 times the height of the trees. For example, if the trees in the windbreak were 40 feet in height they would influence the wind for a horizontal distance of 800 feet on the level. Not only does a windbreak lessen the force of the winter winds but also the searing effect of hot summer winds. Moisture from melted snow held in the snow traps is retained in the mulch and soil under the trees and allowed to evaporate slowly rather than rapidly as it does in unprotected areas.

The remains of tree claims and wood lots scattered about our state is evidence enough that South Dakotans can and have produced trees. If the pioneers had the courage to plant trees and grow them, then their sons may do likewise just as they have grown and will continue to grow crops of wheat and corn.

Most of the trees and shrubs to be used in the windbreak plantings are native to our state, and since they are native, we know they will grow if properly planted, cultivated and protected. Some of the native species to be used are : Hackberry, green ash, cottonwood, aspen, willow, dogwood, choke cherry and numerous other species including vines and evergreens.

Since wild-life conservation is so closely related to and in reality a part of trees and farming, a cooperator who expresses interest and desire may include that phase of the Soil Conservation Service in his tree planting agreement. Trees and shrubs especially suitable for game bird food and cover will be selected with this end in mind.

Cooperators wishing to obtain shelterbelt and homestead plantings must prepare the land, furnish fencing material and agree to cultivate the trees for five years. The Soil Conservation Service will supply free of charge all nursery stock, including replacement stock in case trees die, and all labor necessary for planting trees, constructing fences and material and labor for coal tar creosote preservative treatment of fence posts.

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We are now in the midst of another harvest. Why not leave your back-cuts, outside rounds and a little piece of wheat, oats or barley next to the grove as a source of cover and food for game birds this winter?

Already about one third of all cooperators on the project have expressed a desire to go forward with a tree-planting program.

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SEED OATS FOR EROSION CONTROL

Distribution of oats to farmers of Beadle County for planting on barren areas has been preceeding since June 26th.

This oats, which was formerly A. A. A. oats stored in the elevators of Beadle County, was made available to Director Clemmer under wire dated June 19, 1935, from A. S. Dahl, Assistant Agronomist, Soil Conservation Service, Washington, D. C.

Planting agreements have been signed for 4371 bushels. This oats was seeded broadcast at the rate of one bushel per acre on lands devoid of vegetation, and was covered with a lister or corn cultivator to leave the soil as rough as possible. Much of this oats is already up and is serving its purpose of holding the soil in place.

O. Leon Anderson,

Assistant Agronomist.

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How much has soil erosion decreased crop yields in South Dakota? Well, that is difficult to say but there are considerable areas on which the decrease has been 100% and where the land is still barren of any kind of vegetation. Such areas are not only themselves worthless but they are a menace to adjoining farms and fields.

FIELD BINDWEED OR "CREEPING JENNY"

The Agronomy staff of Project No. 33, S. C. S., attended the field day at State College June 28th and visited the fields where weed control investigations have been in progress for the last eight years. With special reference to field bindweed, "Creeping Jenny", Dr. A. N. Hume, head of the Agronomy Department and C. J. Franzke, in charge of the details of the investigation, said:

"We have been able in two years to reduce the infestation of this weed by 75% to 85% or more at a low cost and without injury to the soil.

"Two methods are recommended: first, where the rainfall is sufficient, and second, where the rainfall is light. In the first case, prepare the land and seed to rye in the fall, five pecks per acre. Do not pasture the rye. Harvest for grain the following summer. Remove grain shocks immediately and disk shallow or use a spring tooth harrow. Seed to sorghum or sudan grass at the rate of 50 or 60 pounds per acre. Allow to grow till fall, then plow under and seed to winter rye. This program should be repeated the second year. If the weeds appear to be gone after the second year a regular cultivated crop may be planted. If the bindweed grows again, it will be necessary to repeat the smothering rotation.

"For drier areas bare summer fallow may be used following the rye instead of sorghum or sudan, the duck foot cultivator being the best implement to use as it tends to bring the root stacks to the top of the ground where they are killed by the sun. Seed the fallow to rye in the fall and harvest the next summer, removing grain shocks and fallowing again. When the vitality of the bindweed has been reduced, a cultivated crop like corn, potatoes, or sorghum may be used instead of summer fallow, the crop being followed by winter rye as usual.

"The length of time required to bring the creeping jenny or bindweed under control may vary with the season or soil type but at State College during the last two years, a very high percentage of a former heavy infestation has been killed."

Dr. Hume said that it had been possible to kill creeping jenny by the use of sprays of calcium chlorate or sodium chlorate but that the expense was very great and the effects of the chemical on the land is noticeable four years after its application.

(Reported by D. M. Hall, Agronomist.)

COOPERATIVE AGREEMENTS COMPLETED SINCE JUNE ISSUE
OF THE "ZEPHYR".

WOLSEY AREA

Name	Address	Owner or Tenant	Description
Lenna M. Jefferson	Huron	Owner	NW¼ and S½ Sec. 30-112-63
Louis Markell	Wolsey	Owner	SW¼ Sec. 10-111-63 SE¼ Sec. 9-111-63
Henry A. Weeks	Wolsey	Tenant	SW¼&NE¼ Sec. 24-111-64
Etta N. Weeks	Wolsey	Owner	
Harold H. Traver	Wolsey	Tenant	NW¼ Sec. 26-112-64
Henry A. Weeks	Wolsey	Owner	
J. C. Meyer	Wolsey	Tenant	S½ NE¼ Sec. 4-112-64 and
J. J. Borah	Huron	Owner	N½ SE¼ " " "
J. C. Meyer	Wolsey	Tenant	N½ NE¼ Sec. 4-112-64, and
Mildred L. Meyer	Wolsey	Owner	SE¼ NW¼ " " "

SHUE CREEK AREA

John Whirledge	Carpenter	Tenant	NE¼, Sec. 12-113-59
Joseph Whirledge	Carpenter	Owner	
Harry Birks	Carpenter	Owner	All Sec. 13-113-59 N½ NW¼ Sec. 24-113-59 N½ SE¼ Sec. 14-113-59
Burr Foote	Carpenter	Owner	NW¼ Sec. 30-113-59 and S½ " " " "
Zack Z. Kleinsasser	Yale	Tenant	NE¼ Sec. 1-112-60
Rural Credit Board	Pierre	Owner	
Thomas Lawless	Cavour	Tenant	NE¼ Sec. 30-112-60
E. A. Thurston, et al	Huron	Owner	S½ NW¼ Sec. 29-112-60
Ed Scheid	Cavour	Tenant	NE¼ Sec. 28-111-60
Martin Scheid	Cavour	Owner	
Lawrence Mack	Cavour	Owner	SE¼ Sec. 4-110-60, and S½ NE¼ Sec. 4-110-60
Theodore H. Walter	Yale	Tenant	SW¼ Sec. 4-112-60
Travelers Ins. Co.	Huron	Owner	
Lorena Paye	Cavour	Owner	N½ NW¼ Sec. 6-109-60, and SW¼ NW¼ " " "
Jerry Pullman	Cavour	Tenant	E½ Sec. 33-112-60
Travelers Ins. Co.	Huron	Owner	
F. S. Davis	Cavour	Tenant	NE¼ Sec. 14-111-60
Travelers Ins. Co.	Huron	Owner	
Frank Gribble	Cavour	Tenant	NW¼ Sec. 11-111-60
Travelers Ins. Co.	Huron	Owner	
John F. Schultz	Yale	Tenant	NW¼ Sec. 28-111-60
Rural Credit Board	Pierre	Owner	
Geo. W. Haynes	Yale	Tenant	SE¼ Sec. 24-112-60
Travelers Ins. Co.	Huron	Owner	
Alfred Kelley	Yale	Tenant	NE¼ Sec. 21-112-60
Edith Wadhams	Huron	Owner	

Shue Creek Area Cont'd.

NAME	Address	Owner or Tenant	Description
John Evans	Huron	Owner	SE¼ Sec. 14-110-61
George Walters	Huron	Tenant	SE¼ Sec. 23-110-61
Mrs. D. C. Glennon	Huron	Owner	
J. H. Chase	Huron	Tenant	NW½ Sec. 1-110-61
Grace Chase	Huron	Owner	
Frank Schley	Huron	Tenant	SE¼ Sec. 17-110-61
Travelers Ins. Co.	Huron	Owner	NE¼ Sec. 20-110-61
			Lot 1 of NW¼ Sec. 20-110-61
W. J. French	Cavour	Tenant	S½ Sec. 26-111-60
H. W. Brinkman	Dolliver, Ia.	Owner	
Alfred Kelley	Yale	Tenant	SE¼ Sec. 21-112-60
Travelers Ins. Co.	Huron	Owner	
Jacob T. Hofer	Yale	Tenant	E½ Sec. 6-112-60, and
Traveler's Ins. Co.	Huron	Owner	NW¼ Sec. 5-112-60
Geo. T. Hofer	Cavour	Owner	SE¼ Sec. 20-112-60, and
			NE¼ Sec. 31-112-60
Sam H. Glanzer	Cavour	Owner	SW¼ Sec. 33-112-60
Adolf Hintz	Cavour	Tenant	SW¼ Sec. 3-111-60, and
A. R. Koch	Ridgeway, Ia.	Owner	NE¼ Sec. 9-111-60
Herman Moeller	Cavour	Owner	S½ Sec. 21-111-60, and
			S½ N½ Sec. 21-111-60
Gustav Boettel	Cavour	Owner	NE¼ Sec. 23-111-60
George Dollenbacker	Cavour	Tenant	NE¼ Sec. 33-111-60
James Turney	Clinton, Ill.	Owner	
Earl Randall	Huron	Tenant	N½ Sec. 14-110-61
Northwestern Mutual Life Ins. Co.		Owner	
Martin Lee	Huron	Tenant	SE¼ Sec. 34-111-61
Rural Credit Board	Pierre	Owner	

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WESTERN WHEAT GRASS

Possibly once or twice in a lifetime will western wheat grass, or "salt" grass produce seed as it is doing this year. Farmers should capitalize upon this abundance of seed and utilize it to bring back many of the native pastures which have been overgrazed and permitted to grow up to weeds.

Ripe wheat grass hay may be scattered over the old pastures with very gratifying results.

If one desires to get away from handling so much bulk the wheat grass heads may be cut with a header and the heads scattered over the pasture.

A quantity of the heads may be used in this way or the heads may be threshed and the seed cleaned for market. If threshing is done, the concaves should be placed as for flax threshing and the fan shut off, otherwise, the seed will go over in the straw.

Western wheat grass is not readily separated from the hull. In order to get good separation, it will be necessary to run the threshings through a bur mill.

E. H. Aicher,
Chief Agronomist.

N O T E S AND C O M M E N T S

(Of Interest To All Of Us)

At this time, July 23, 1935, there are 104 cooperators in the soil conservation area on our Federal Project No. 33. These farmers have completed their agreements to carry out the program on 26,048 acres of land.

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If you are not already a cooperator, it would be a good move to find out just what is being done on cooperators' farms, and send in your request for information. Someone will call to see you and discuss the soil conservation program with you.

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The Soil Conservation man who visits your farm is your friend. He will help you with your farm plans to the extent of his ability. You may be sure that his attitude will always be sympathetic and helpful.

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"I have never yet signed an agreement or a contract with the government that did not prove to be a benefit to me." That statement was made by Louis Markell, a cooperator in Hartland township. Mr. Markell has a half section of good land, about one third of which has blown, but he is taking no chances and is planning a strip cropping and soil building program.

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Farmers interested in making a sweet clover seed harvester may secure detailed plans from the office of the Soil Conservation Service. This reaper can be constructed from an old binder at a small cost.

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The Soil Conservation Service will have an exhibit at the South Dakota State Fair in Huron, S. D., September 9th to 13th, 1935. The Washington office and the staff of the local project will cooperate in the exhibit. You are especially invited to visit the exhibit while at the fair. The exhibit will be in the Agriculture Building.

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During the State Fair, it is planned to conduct daily tours to the conservation areas for the benefit of those who may wish to visit the farms where cooperators are carrying out the program.

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The oldest living thing on the earth, in so far as known, is a tree. The man who plants a tree and cares for it leaves a living monument and those who come after him and enjoy its shade and shelter will bless him for his thoughtfulness.

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Trees do not grow wild in many parts of the Great Plains, but neither does corn, wheat, oats or flax, for that matter. The selection of the proper soil and the intelligent care of trees will allow them to grow in many places where they cannot now secure a foothold.

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If you have any comments or notes of interest, feel free to send them to the office at Huron, South Dakota.

"Two vast and trunkless legs of stone
Stand in the desert. Near them, on the sand,
Half sunk, a shattered visage lives.

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And on the podestal, these words appear:
"My name is Ozymandias, king of kings!
Look at my works,ye mighty, and despair!"

Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare,
The lone and level sands stretch far away."

Shelley.

DUST AND DESTINY

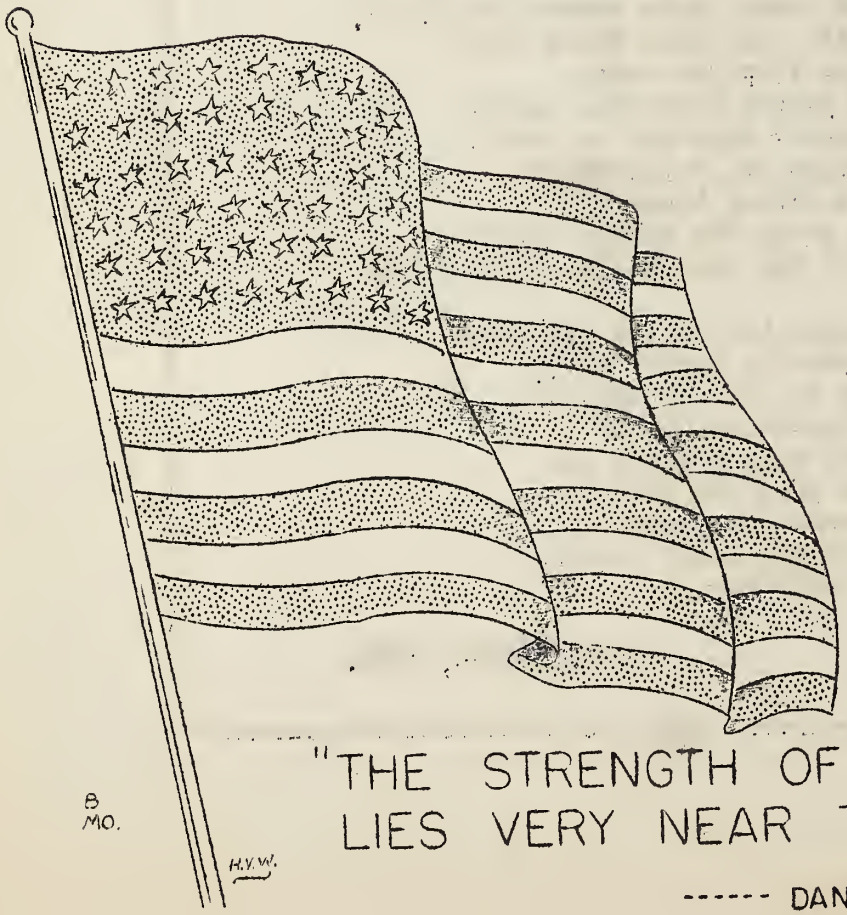
The dusts of ages cover
All the "Cities of the Plain"-
Babylon and Nineveh and Ur.
The one-time fertile soil
That fed the nations of the past
Now forms their common sepulchor,
While senseless Waste today
Rips from the womb
Of Mother Earth the unborn
Life of ages yet to come -
Brings on, doom-fraught,
The rising blast
To sweep the modern nations
With the dust-heaps of the past.

Naught but proven knowledge,
Directing honest toil,
And the moving thought
Of peace on earth
Good will towards men
Can save the soil -
Perhaps the soul -
From the dusty destiny
Of Oblivion.

J. G. Hutton, 1933.

UNITED STATES
Department of Agriculture
Soil Conservation Service
Huron, S. D.

Official Business



"THE STRENGTH OF THE NATION
LIES VERY NEAR THE SOIL"

------ DANIEL WEBSTER