

CONSERVATION

IS

EVERYONES

BUSINESS

The work Books are prepared for your use through the cooperation of:

Tama County Superintendent of Schools
Tama County Soil Conservation District
Soil Conservation Service USDA

C O N T E N T S

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I D E N T I F I C A T I O N

Your Name _____

Address _____

School _____

Grade _____

Teacher _____

Do You Live on a Farm? Yes ____ No ____

INTRODUCTION

CONSERVATION! Is it something new in recent years? Who is responsible for the increased emphasis? Is it really so important?

George Washington, our first president, wrote of excessive soil losses from erosion. He mentioned with disfavor the exploiting of other natural resources, during the colonial days of our Country. He encouraged the use of Conservation measures. Conservation is not new.

Many leaders since George Washington have cautioned against the waste of our natural resources. Men such as former President Theodore "Teddy" Roosevelt, and ex-President Herbert Hoover. The emphasis these and other leaders placed on the need for conservation, finally brought about increased public interest. This led to actual programs being established. Hugh H. Bennett, the Chief of the Soil Conservation Service, developed a large part of, and encouraged the use of the Soil and Water Conservation Programs we are studying today. Jay N. "Ding" Darling, great cartoonist, brought about through his work, much of the Woodland and Wildlife Conservation we are studying today. These men did not work alone. They were aided by many of our agricultural and public leaders. It was brought about by many working together. The increased emphasis is the result of a continued and expanding education program.

Do you want a continued supply of good food? Do you want a continued high standard of living? Do you want to have a continued supply of the many pleasure giving things of life for yourself and those who follow you? YOU and I hold the final answer. If we want these things, we will learn more of Conservation and its application, and we will use Conservation. WE, YOU and I together, will determine if it is important.

INSTRUCTIONS

This Conservation Work Book is the third in a series of three. The Work in the book follows the material presented in Book XIV, Iowa Elementary Teachers Handbook "The Teaching of Conservation" as prepared by the State Department of Public Instruction.

It is not intended that students do work other than that called for. An honest effort to complete it, as any other work book is all that is intended.

It is suggested that these books be used in one of the following series of three grades; 5th, 6th, and 7th; or 6th, 7th, and 8th. If used in this way, a continued use of the series of three books, will not necessitate any students using any book more than once.

AWARDS

The sponsors of the book, working in cooperation with your School Superintendent and the County Superintendent of Schools, have arranged to present a series of awards for completed books. The awards will be as follows:

CITY SCHOOLS

Individual Awards

To Each Grade or Division
of a grade, in all schools,

Medal for 3 Superior Books

SCHOOL AWARDS

Trophy to the three schools
submitting highest per cent
of completed books. Review
points will be used, as
needed to determine awards

RURAL SCHOOLS

Individual Awards

Books will be divided into 10
equal size groups. To each
grade in all groups.

Medal for 3 Superior Books

SCHOOL AWARDS

Trophy to two schools sub-
mitting highest per cent of
completed books. Review
points will be used as needed
to determine awards.

Additional medal awards will be made within any grade, in any school, or group, if warranted by the number of superior books.

The Conservation Work Books submitted will be reviewed by the County Superintendent of Schools, and the Tama County Soil Conservation District Commissioners.

The basis for review of the books to determine awards will be:

- | | |
|-----------------|-----------------------------|
| 1. Completeness | 3. Presentation of Material |
| 2. Neatness | 4. Correctness |

The Work Books should be completed and returned by April 19, 1952 to the County Superintendent of Schools, Toledo, Iowa, to permit review before the end of the school year.

N A M E S

Fill in the correct names:

U. S. Secretary of Agriculture _____

State Conservationist
U. S. Soil Conservation Service _____

State Director
Iowa State Conservation Commission _____

Your County Conservation Officer
Iowa State Conservation Commission _____

Your County Extension Director
Agriculture Extension Service _____

Your County Soil Conservationist
U. S. Soil Conservation Service _____

Your County Soil Conservation
District Commissioners _____

MAINTAINING SOIL FERTILITY

1. Soil fertility and human health are closely related. Write a paragraph telling something of this relationship.

2. The food we eat is produced directly or indirectly from the soil. Make lists of food produced from the following.

Animal Products

1.

2.

3.

4.

5.

6.

7.

Plant Products

1.

2.

3.

4.

5.

6.

7.

Paste below 3 pictures of foods produced from animal products
and 3 foods produced from plant products. Be sure and label
them.

MAINTAINING SOIL FERTILITY (Cont)

1. There are three plant food elements that are among the first to become used up in our soils. One is a lime element while the other two are fertilizer elements. Can you name them?

A. _____ B. _____

C. _____

2. There are three plant food elements furnished from the air and water. What are they?

A. _____ B. _____

C. _____

3. There are fifteen elements necessary for plant growth. Can you name those not given above? Seven of these are called trace elements. Underline them.

A.

E.

B.

F.

C.

G.

D.

H.

I.

Draw a picture of a corn leaf in each of the spaces below.
Color each of the leaves to show a shortage in that leaf of
the elements at the top of the space

A. Nitrogen

B. Phosphorous

C. Potash or Potassium

MAINTAINING SOIL FERTILITY (Cont)

Plant food elements are used up or removed by the three methods given below. Write a short paragraph telling something of each of them.

1. Plants

2. Erosion

3. Leaching

Soils vary from area to area, and from farm to farm. Draw or place here a sketch map showing the major soil type areas found in Iowa. Label each area and outline your county on the map.

MAINTAINING SOIL FERTILITY (Cont)

1. What is the first step or process to determining the elements in short supply in a soil.

2. Write a short paragraph telling why farmers should do the step given above.

3. Suppose we operate a farm so that all erosion is controlled. Can we expect to maintain good yields without adding any plant food elements? If not, tell why it isn't possible to do so.

A. Make a list of soil management practices.

1.

2.

3.

4.

5.

6.

B. Make a list of reasons why we want to maintain soil fertility.

1.

2.

3.

4.

5.

6.

FARM CONSERVATION PLANNING IN IOWA

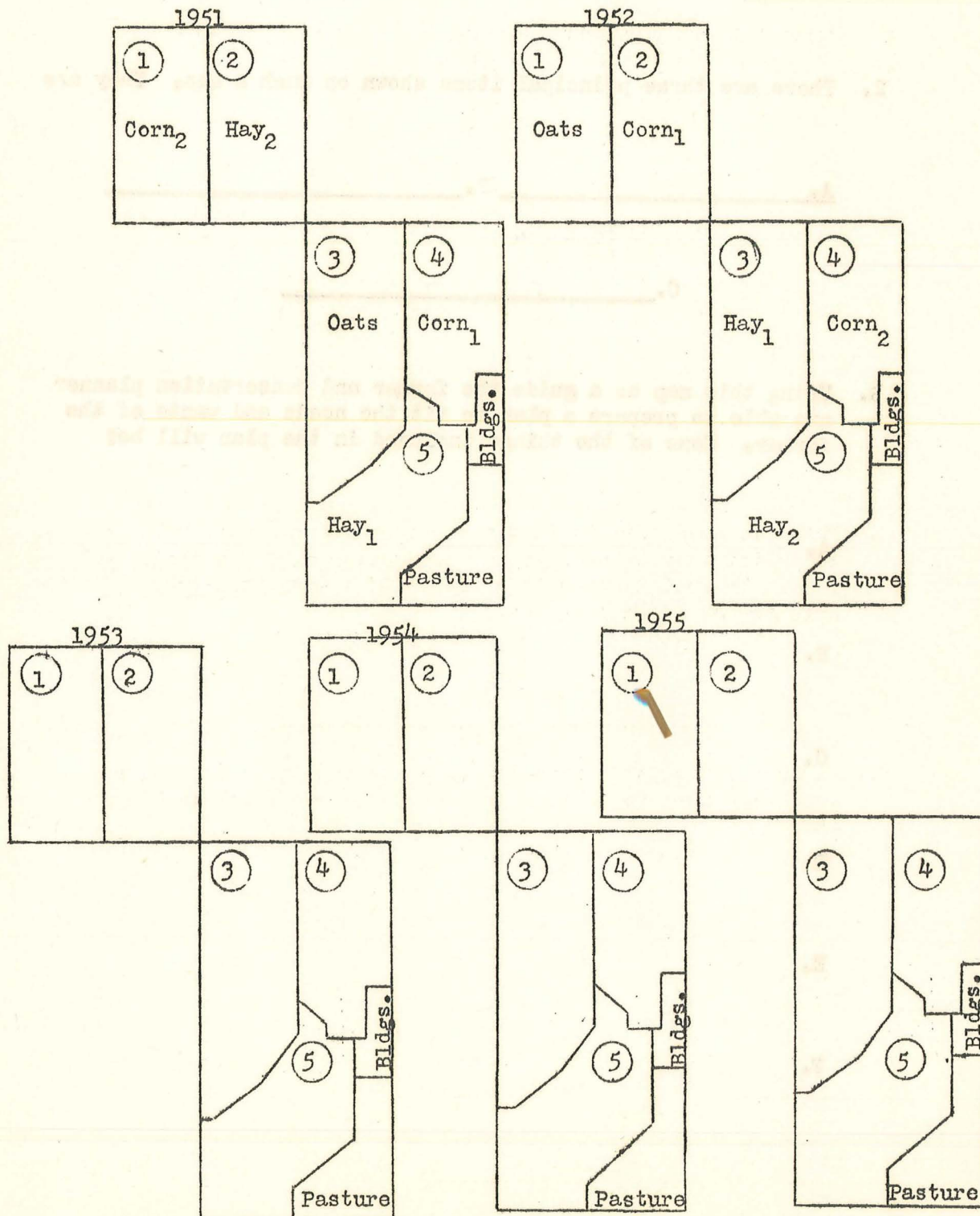
1. What is the largest single business in Iowa?

2. Write a short paragraph telling some reasons why every farm should have a conservation plan.

3. There is available to farmers, upon their request, help to assist them to prepare a conservation plan for their farm. To what local unit of State Government are they able to make such a request?

4. Farmers making such requests often make them in groups, and are encouraged to do so. Write a short paragraph telling why.

One of the important parts of a conservation plan is the crop rotation plan for the cropland on the farm. Below are the outline maps of a farm using a rotation of Corn₁, Corn₂, Oats, Hay₁, Hay₂. We have indicated the crops for the year 1951, and 1952. Fill in the crops for the various fields for the years 1953, 1954, and 1955 to complete the rotation. Color the fields in corn, yellow, in oats, brown, and the fields in hay, green.



FARM CONSERVATION PLANNING IN IOWA

1. The preparation of Farm Conservation Plans is based on

_____ maps

2. There are three principal items shown on such a map. They are

A. _____

B. _____

C. _____

3. Using this map as a guide the farmer and conservation planner are able to prepare a plan to fit the needs and wants of the farmer. Some of the things included in the plan will be:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

A good conservation plan will bring together all the things necessary to maintain soil fertility and hold the soil. It will also provide for the farmers wants and needs. The end result of putting the plan into operation will be to furnish a good income for the farmer, and furnish all of us with food clothing and shelter. Paste here at least four pictures of products other than food we receive from the farm. Be sure and label them.

While the soil is being held in place and the water is being held in place, the farmer can produce a good income for himself and his family.

The first step in a conservation plan is to hold the soil in place. This can be done by using a variety of methods, such as contour plowing, strip cropping, and terracing. These methods help to prevent the soil from being washed away by the water.

Second, the farmer must hold the water in place. This can be done by using a variety of methods, such as building dams, levees, and dikes. These methods help to prevent the water from flowing away from the farm.

Third, the farmer must hold the water in place. This can be done by using a variety of methods, such as building dams, levees, and dikes. These methods help to prevent the water from flowing away from the farm.

Fourth, the farmer must hold the water in place. This can be done by using a variety of methods, such as building dams, levees, and dikes. These methods help to prevent the water from flowing away from the farm.

Fifth, the farmer must hold the water in place. This can be done by using a variety of methods, such as building dams, levees, and dikes. These methods help to prevent the water from flowing away from the farm.

LEGUMES AND GRASSES IN CONSERVATION

1. When the pioneers came to Iowa, the open land or prairies was covered with a mixture of

_____ and _____

while the more rolling land along the streams and rivers was covered with

2. The first land to be broken for cultivation was the timbered areas following the tree removal. The development of what agricultural implement was necessary before the prairie land could be used for crop production?

3. Legumes and grasses are important not only for hay and pasture but because they furnish or help supply

_____ and _____.

4. Of the two soil fertility items named above, one is furnished primarily by the legumes while the other is furnished by the grasses. Name the proper one for each.

Legumes furnish _____.

Grasses furnish _____.

Paste here pictures of at least three legumes or grasses. Be sure and name each one.

LEGUMES AND GRASSES IN CONSERVATION (Cont)

1. Nitrogen is one of the important elements for plant growth. Write a short paragraph telling how legumes return nitrogen to the soil.

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2. What four legumes are of the greatest importance in Iowa?

A. _____ B. _____

C. _____ D. _____

3. What two grasses are of the greatest importance in Iowa in rotation meadows?

A. _____ B. _____

4. What legume and what grass have come to important prominence in the last few years on farms in Iowa.

The legume is _____.

The Grass is _____.

1. Make a drawing illustrating the paragraph you wrote under number 1 on page 20.

2. Some grasses and legumes are used in rotations for short periods of years following row crops. Others are used for more permanently grasses areas. Make a list of these.

Rotation Meadows

Legumes

Grasses

Permanent Pasture or Meadows

Legumes

Grasses

CONSERVATION AGENCIES AND ORGANIZATIONS

There are several organizations and public agencies who work with farmers on conservation problems and promote conservation activities. Write a short paragraph about each of the ones listed below.

A. Soil Conservation Districts.

B. Soil Conservation Service (U.S. Dept. of Agr.)

C. Production and Marketing Administration (U.S. Dept. of Agr.)

CONSERVATION AGENCIES AND ORGANIZATIONS (Cont)

D. Agriculture Extension Service (U.S. Dept. of Agr.)

E. Izaak Walton League and Wildlife Conservation Organizations.

F. State Conservation Commission

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