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# CONSERVATION OF THE SOIL

BY

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It is much to be deplored that there is not in our schools a single book to tell the youth what everyone should know concerning the foundations of life in the soil or the conditions under which the generation to which he belongs may pass on the precious heritage to those who are to come after. Such instruction can alone be enforced through the exertions of those who have been brought to see the truth and who are willing to labor for its diffusion.—N. S. SHALER, 1896.



## PREFACE

Soil erosion in the United States has been recognized as a menace to agriculture, if not to the population as a whole, for many years. A beginning has been made during the past thirty years and more particularly during the past decade in obtaining accurate information on the losses of soil by erosion and on methods of controlling these losses under varied cropping systems.

"Conservation of the Soil," is presented for the use of land-owners and operators, for those concerned with land mortgages, for general readers, for county agricultural agents, and for use in college and high-school courses in soil conservation.

The author's interest in the control of soil erosion dates back to his boyhood. Nearly every spring he assisted with the replanting of corn which had been washed out by heavy thundershowers. For several years he supervised the state soil-erosion control field in southern Illinois and in 1918 published the results jointly with the late Professor J. G. Mosier in *Illinois Experiment Station, Bulletin 207*.

During more recent years he has urged the control of soil erosion in both extension and agricultural experiment station publications. In 1935 he spent a brief leave of absence from his regular duties, as chief soil erosion expert on the Federal Soil Conservation Demonstration Project in southern New York.

In the autumn of 1935 when this book was begun there was no book on this subject. Since then two excellent works have been published: "Soil Erosion Control," by Austin Earle Burges; and "Soil Erosion and Its Control," by Quincey C. Ayres.

Great care has been taken to present complete, correct references and to give credit to the exact sources of data. Pictures that are not the author's own work are acknowledged directly in connection with each illustration.

Hitchcock has been followed for the scientific names of grasses (*Miscellaneous Publication 200*). Other publications of the



U. S. Department of Agriculture have been followed in the main for the names of other plants mentioned in the text.

The author desires to acknowledge the cooperation and helpful suggestions of his colleagues in Cornell University and in the Soil Conservation Service. He will welcome suggestions for the improvement of this book.

A. F. GUSTAFSON.

ITHACA, N. Y.,  
*February, 1937.*

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