

Preface

In the past two decades, an increasing number of soil studies have focused on soil carbon (C). Most of these studies were related to stock assessment, monitoring, microbial dynamics, loss of C, tillage effects, soil management, economics, or policy issues – to name a few topical areas that have been widely researched and discussed. The driving force for much of soil C research is related to climate change or the maintenance of soil quality and fertility. Few topics cut across the whole soil science discipline wider than research on soil C.

In 2009, the International Union of Soil Sciences (IUSS) recognized the need for a conference that focused on a single topic that is of interest to all IUSS Divisions, Commissions, and Working Groups. Naturally, it was decided that the conference topic should be soil C and that the conference should have an interdivisional and intercommissional approach. To achieve this goal, it was decided that there should be no concurrent sessions and that the conference should consist of sessions with several short presentations followed by ample discussions. The IUSS Global Soil C Conference was held in June 2013 in Madison, USA, and consisted of 3 days of presentations and discussions, followed by a 1-day field trip. There were 140 participants from over 30 countries.

This book contains selected papers from the IUSS Global Soil C Conference. The conference presentations were structured by IUSS Commissions and Working Group under each of the four Divisions. We have more or less kept this structure for the book and loosely grouped papers in four sections: Soil Carbon in Space and Time; Soil Carbon Properties and Processes; Soil Use and Carbon Management; and Soil C and the Environment. We have selected papers that focus on novel and exciting aspects of soil C research, and a few review papers.

We are greatly indebted to all IUSS officers, all conference participants, and authors who helped shape the conference and made excellent contributions to discussions and papers in this book. We acknowledge the financial support from the College of Agriculture and Life Science (CALS) and the Department of Soil Science at the University of Wisconsin—Madison. Special thanks go to Bill Bland and

Birl Lowery and to CALS Conference Services (Leah Leighty) for assistance in the organization of this global conference.

It is our hope that the carbon that was needed to bring these soil scientists together be counterbalanced by the knowledge gained to manage it wisely.

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<http://www.springer.com/978-3-319-04083-7>

Soil Carbon

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2014, XXVI, 506 p. 143 illus., 96 illus. in color.,

Hardcover

ISBN: 978-3-319-04083-7