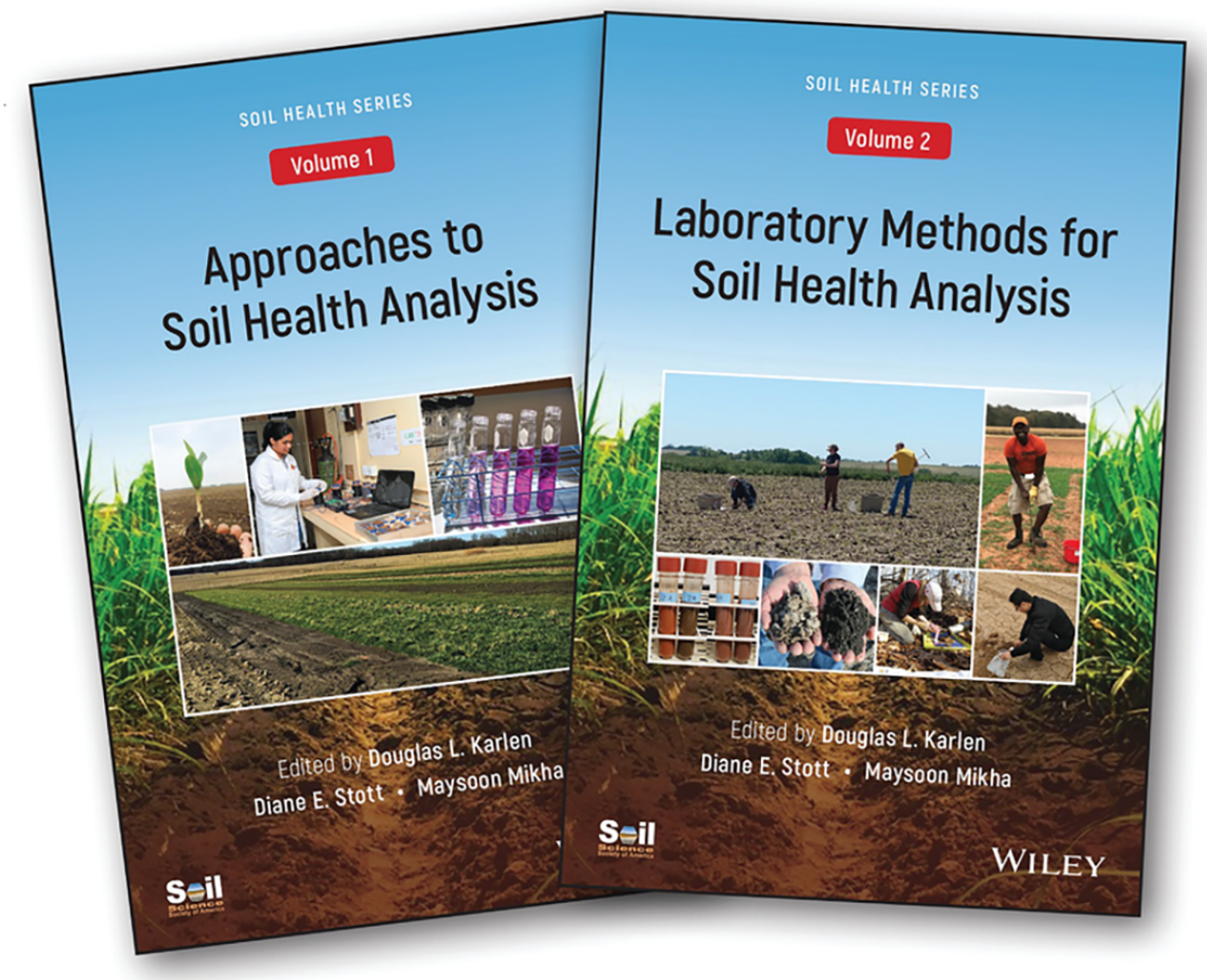
Science Societies

New books

Soil Health, Volumes 1 and 2

July 21, 2021



Curious about soil health? Want to make sure your methods are up to snuff?

Soil Health, Volumes 1 and 2 might just be for you. These new books represent a wealth of knowledge, edited by three of the country's leading soil health experts. The first volume, *Approaches to Soil Health Analysis*, represents the historical, theoretical, and practical aspects of understanding soil health; the second, *Laboratory Methods for Soil Health Analysis*, defines basic analysis methods for soil tests that help guide sustainable management of our fragile soil resources.

Here, *CSA News* magazine discussed the newly released books with co-editors Douglas L. Karlen, Diane E. Stott, and Maysoon M. Mikha. Karlen retired from USDA-ARS as a Research Soil Scientist after a 40-year research career. Stott, also retired, was previously the National Soil Health Technical Specialist for USDA-NRCS, with a 30-year career as a USDA-ARS research scientist before that. Maysoon Mikha is an active Research Soil Scientist with USDA-ARS.

The following interview has been edited for length and clarity.

CSA News: What spurred the idea to write two new volumes on soil health?

Stott: I was working as the National Soil Health Specialist for the NRCS, and I was talking to a lot of people about soil health. I realized we're using *so* many methods for getting the supposed same answer. The problem is you don't get the same answer. We realized we need to come back to some basic, common measurements, so we can compare apples to apples.

Karlen: In the mid-1990s, there were two books that became affectionately known as the “Green Book” and the “Blue Book” that addressed soil quality. This project stems from the fact that it’s been 20 years since the Societies published those books, and it really was time to provide an update with regard to soil health.

Mikha: We thought, let’s pull all of this together. We’re already working with it, but our thoughts were all spread out—so we collected them.

CSA News: How would you sum up the volumes in just a sentence or two?

Mikha: We’ve been working for a long time, and these books are a composite of all the information that beginners, students, even professors who want to teach a concept, can use. They have basic information about soil health and cover the three main components: physical, chemical, and biological properties and processes.

Karlen: It’s an update on the progress that has been made in addressing the concept of soil health in the past 20 years and an introduction to the numerous future challenges we face.

CSA News: Who do you see benefitting the most from reading these books?

Stott: I hope it helps laboratories, consultants, land managers, and students. Anyone who wants an understanding of soil health—the first book will give that to you.

Karlen: We hope laboratories and people who are doing soil health evaluations will use these volumes to cross-check what they’re doing, to make sure they’re providing their clientele the best possible soil health assessments in terms of agreement or disagreement in the scientific community. We feel like we’ve got the best scientists as authors and a fair presentation of how to make these measurements. Also, just looking

at the general CCAs who are interested in this thing called soil health. It could also be a text for colleagues, people developing and teaching courses on the concepts of soil health.

CSA News: How did you select contributors for the chapters?

Mikha: We got together as a group and discussed it and started looking at the best people working in these areas. Through our collaborations and interactions with other scientists, then we started choosing people to write.

Karlen: We brainstormed who was working in these areas and having been part of the soil quality/soil health leadership from the get-go, we sort of knew who to arm-twist. We identified the senior-most, lead person, and they would identify whoever they wanted as coauthors.

Stott: We looked for people in the research arena who had a long history of working with these types of methods. We know the methods that are out there, we know which ones are working and being used, and so we went for the best methods that will work for high-throughput labs.

CSA News: Why do you think these books are important?

Stott: We want to get everyone using a common language, getting numbers that are comparable—numbers where we know what they mean, and we can tell people where they are on their soil health journey. Soil health *is* a journey. You look at where you are now and where you want to be, and you start to change one thing at a time to improve the health of your soil. But right now, there are almost as many methods as papers. It makes it incredibly hard to compare results. We put this book together with an understanding of soil health as it is in 2021, to compile the basic methods we consider

the best at this time.

Karlen: Soil is the foundation that links everything together. We don't envision this as the final word on methods of soil assessment, but it's the 2021 "where are we in the world."

Soil Health: Volumes 1 and 2 will soon be available for purchase through the Wiley Online Library. Visit wiley.com and type in "Soil Health" in the search box to place an order. Use discount code "SHA135" for Volume 1 and "SHA235" for Volume 2 to receive a special introductory discount of 35% until 15 Oct. 2021.

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