Revising the Soil Survey Manual

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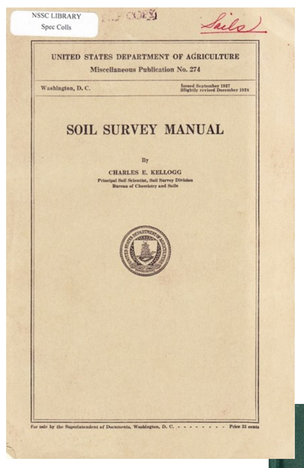
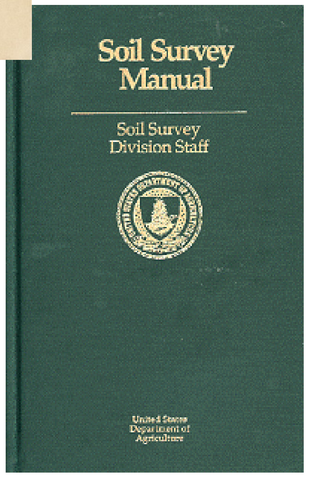
History of the Soil Survey Manual

The Soil Survey Manual has long served as a primary guide to field soil scientists' conducting soil survey. It not only guides to those who make and interpret soil surveys, but also serves as a technical source of nomenclature, methods, and procedures for students of soils and other natural resource specialists using soil survey information.

The Soil Survey Manual traces its origins back to 1937 and Dr. Charles E Kellogg as Miscellaneous Publication No. 274 as an assemblage the ideas and labors of the hundreds of soil scientists working in the field in the previous 38 years. The Soil Survey Manual has served generations of soil scientist's performing soil mapping and interpreting soil for its uses. It provides background information to non-soil scientists in hour surveys are conducted.

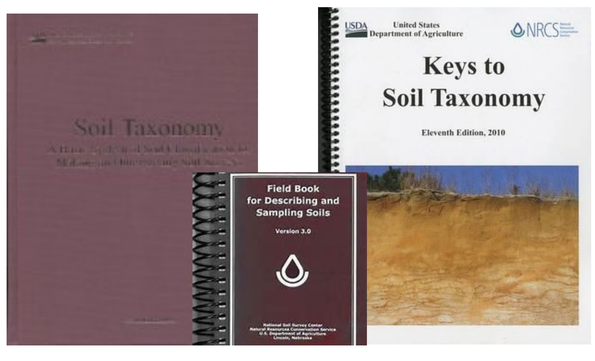


The Soil Survey Manual's initial printing was with paperback binding, half page format containing 136 pages. The manual was updated and released in 1951 with a green hardback cover as Agricultural Handbook #18.



The Manual was revised slightly and reissued again in 1962. The most recent updated was last performed by the NRCS Soil Survey Staff in 1993. The Soil Survey Manual serves as the basis and primary reference for more recent documents and guides including the Field book for Describing and Sampling Soils and the National Soil Survey Handbook.

Twenty years have lapsed since revision of the 1993 edition of the Soil Survey Manual. The Manual is out-of-print, but remains available for download at http://soils.usda.gov/technical/manual/ .



Revision and Update Process

A Working Group consisting of soil scientists from NRCS and soils faculty at cooperating universities was organized in August 2012 and is revising the Soil Survey Manual. The objectives and purpose of the Manual will remain the same it has been throughout its history. This update to the Manual will be published digitally and take full advantage of the flexibility digital publishing affords including expanded use of graphics and photography, tabular data, hyperlinks to other references and research articles, and adapted for viewing on devices such as tablets and smartphones.

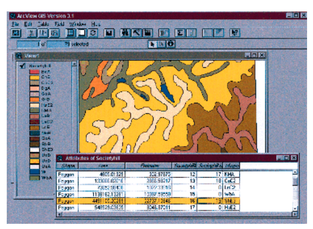
Technical advances in the science of soils and methodologies for conducting soil inventories brings about a need to update the Soil Survey Manual to maintain its usefulness. In addition, new emphasis in emerging soil environments such as subaqueous anthropogenic soils, and the advances in data analysis, management and information display need addressed in the Soil Survey Manual.

Dr. Janis Boettinger is coordinating subject matter expert guest authors who are developing new chapters and sections to address subjects such as remote sensing and digital mapping tools.

New Topical Chapters

Significant new areas being developed include:

- digital soil mapping techniques;



- geospatial analyses utilizing tools such as satellite imagery and LIDAR data;

- use of geophysical technologies such as GPR, EMI, and active/passive radiation sensors;

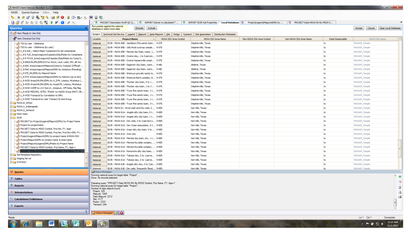
- other common integrated field tools such as GPS and GIS;

- description and mapping of subaqueous soils;

- description and mapping of human altered and transported materials (HATM);

- Integration of soil climate data, monitoring, and analysis;

- New hardware, data management and analysis tools (NASIS). Pedon PC, and statistical tools.



- Update and modernization of all chapters of the manual, but most notably to the examination and description of soils (Ch. 3) and soil interpretation (Ch. 6).

Delivery Format

A new delivery format will be used for the revised Soil Survey Manual facilitate timely updating of sections as needed and reduce the production costs.

Key features are:

- Digital publishing – Likely not be published hardbound in any quantity, but have printer friendly format available.
- Layout and navigation designed for use on a computer, tablet PCs and other mobile devices .
- Extensively utilize illustrations, diagrams, and photographs to aid in understanding technical and unfamiliar concepts and conditions.
- Utilize internal and external Hyperlinks to data sources and information enabling rapid access to external information and return to previous section.
- Key word searchable .
- Continuously updated available for access .

Timeline

- Edits to selected existing chapters underway
- Guest authors for new chapters/subjects identified
- Initial review of revised and new sections by early 2014
- English edit, typesetting for multiple delivery formats 2014
- Final review and delivery – late 2014