

Standards and Operating Procedures of the National Cooperative Soil Survey

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NCSS Standards

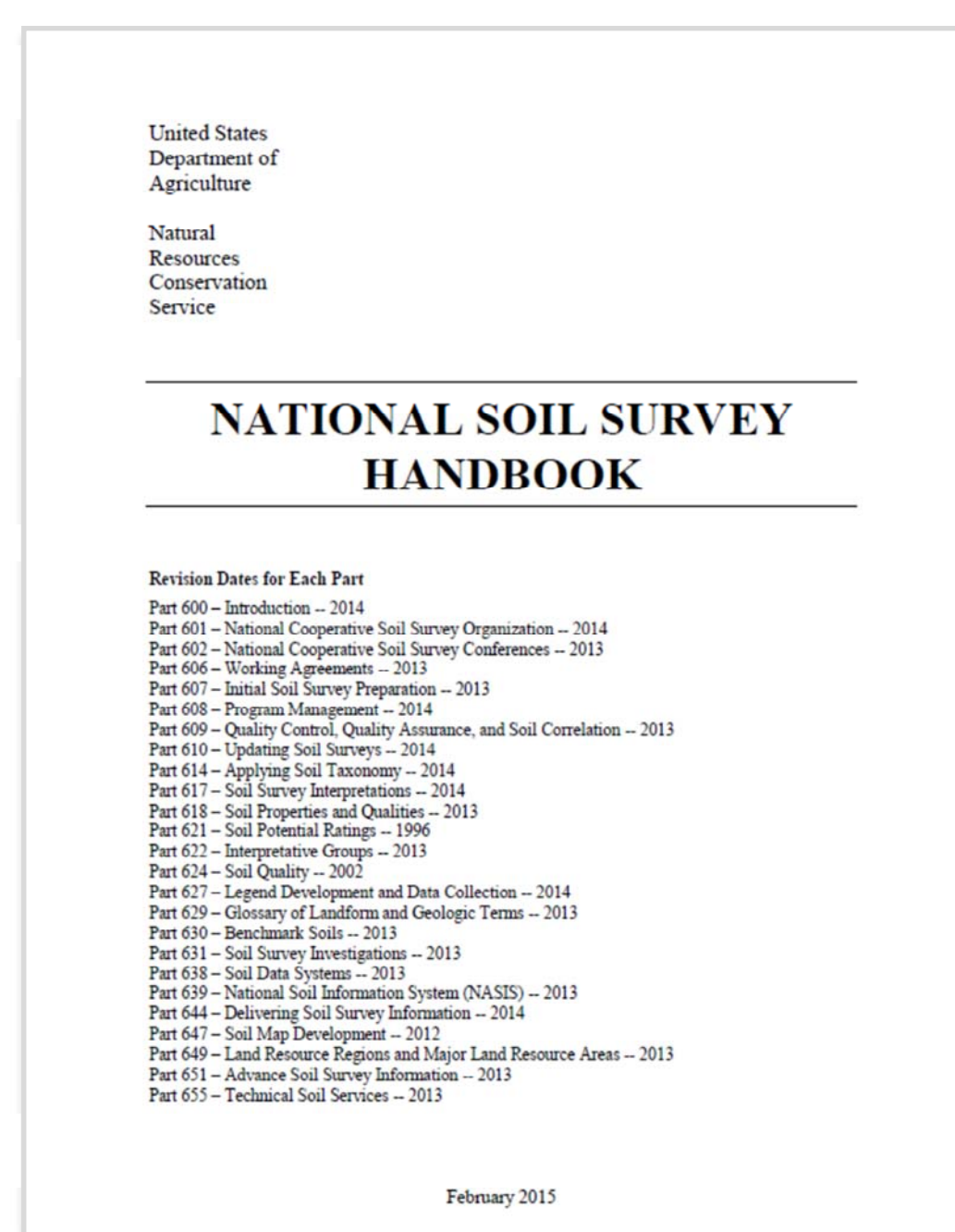
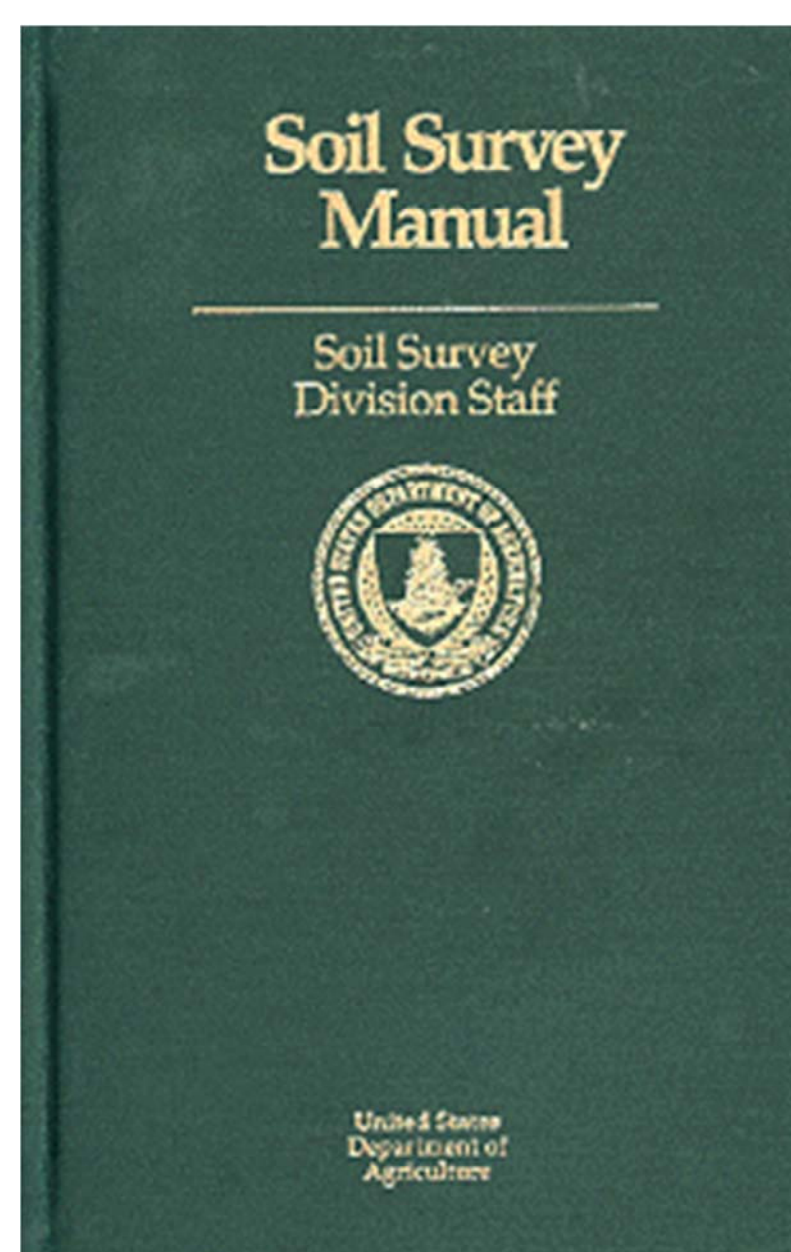
The standards and procedures of the National Cooperative Soil Survey Program (NSSC) provide the basis upon which application and communication of scientific principles is built. Standards in use in the NCSS are designed and adopted by the soil science community and evolve to remain current with scientific knowledge about soils, with the advances in technical tools developed to conduct soil survey, and with the emerging needs for new data and information. They must be:

- Precisely defined and written
- Published and widely available
- Dynamic and adaptable (with technical advances) as needed
- Widely adopted and applied by practitioners
- Applicable across space and time

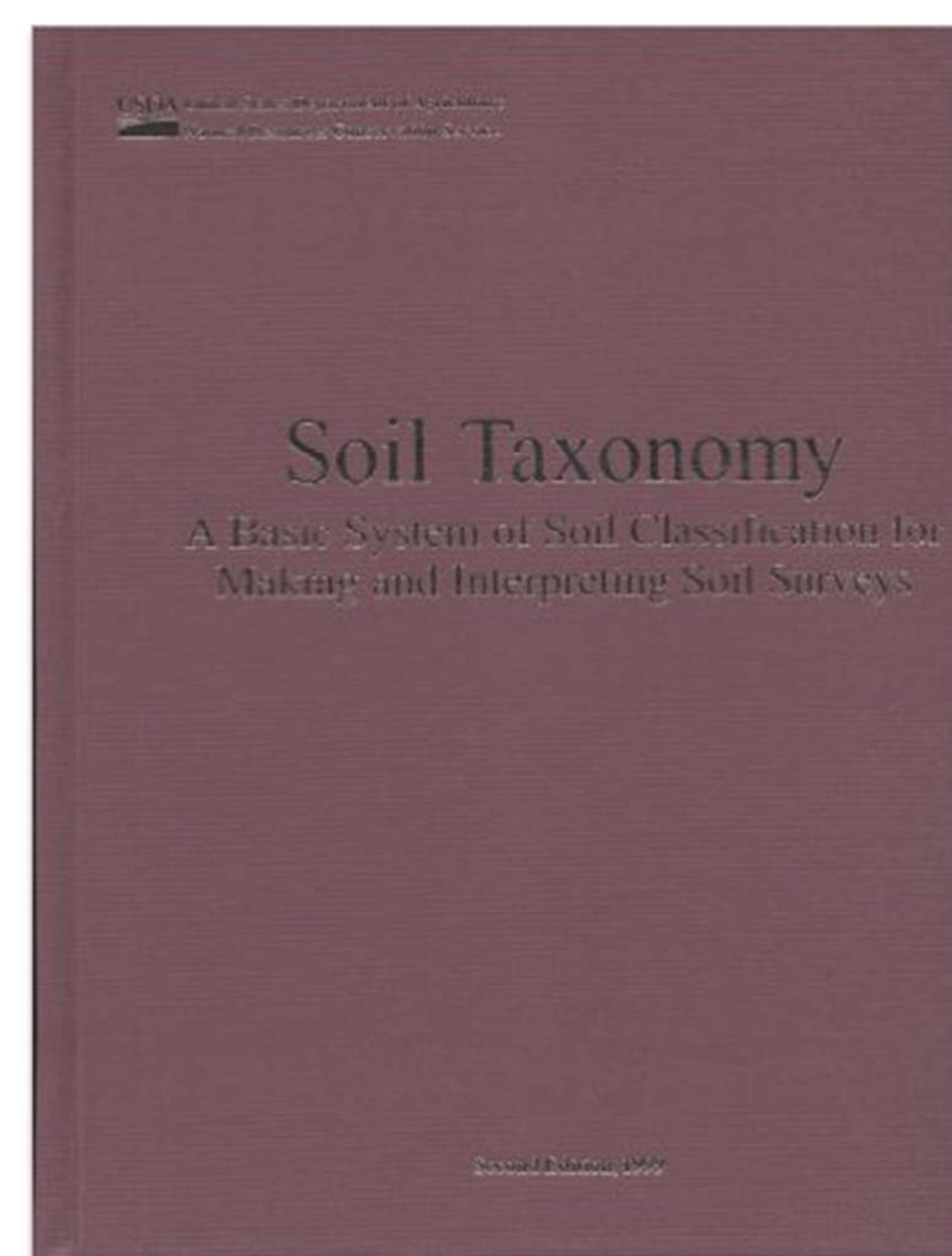
The Documents

The NCSS standards in policy, procedure, definition, methods, and general guidance are provided in:

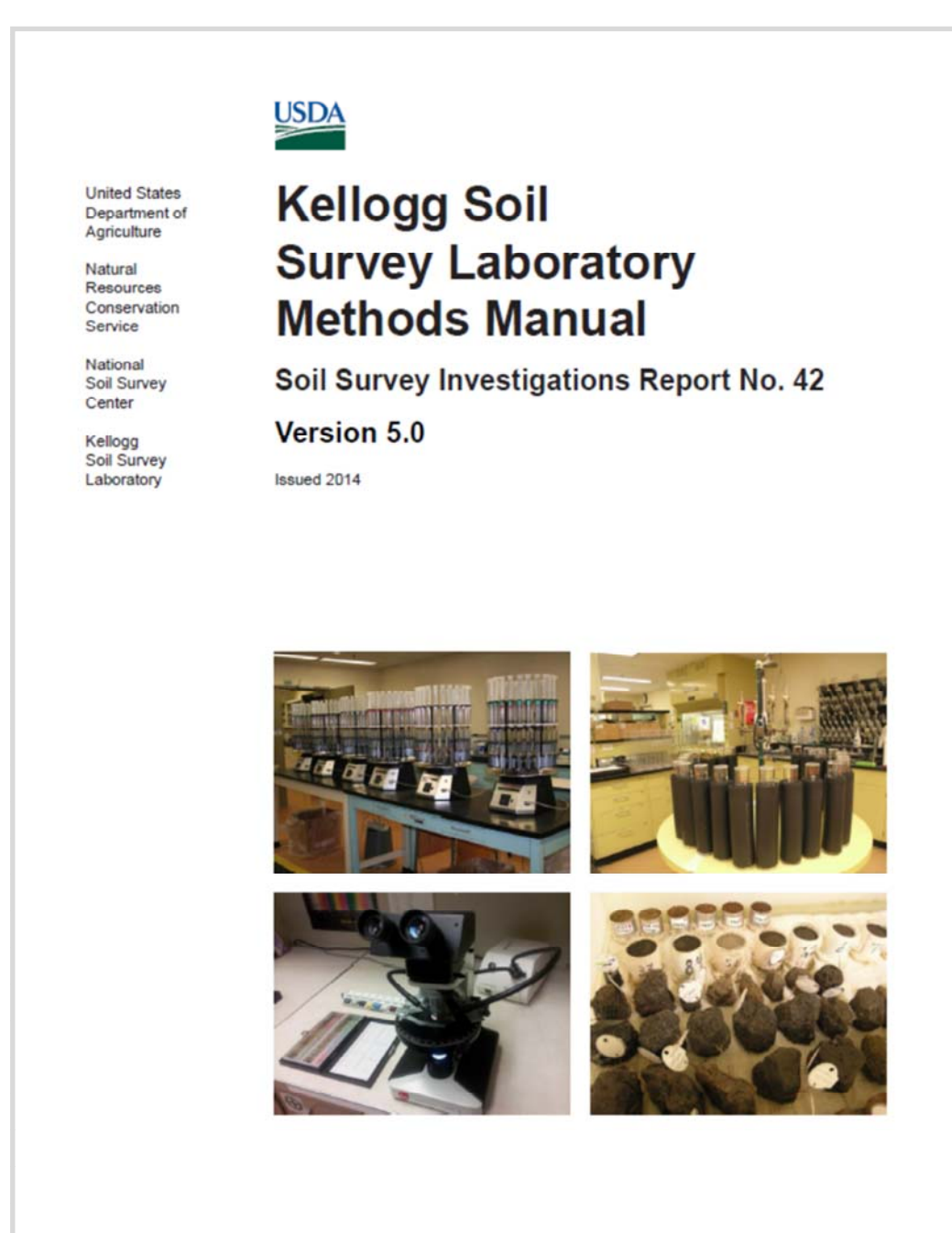
- Soil Survey Manual (Ag. Handbook #18, 1993)



- National Soil Survey Handbook (thru Amendment #29, 2014)



- Soil Taxonomy (2nd edition, 1999)

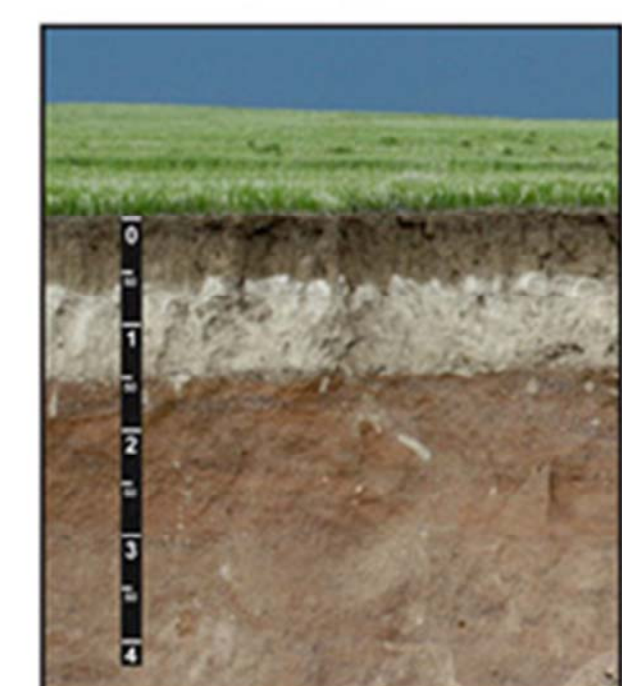


- Laboratory Methods Manual (SSIR #42, ver.5.0, 2014)

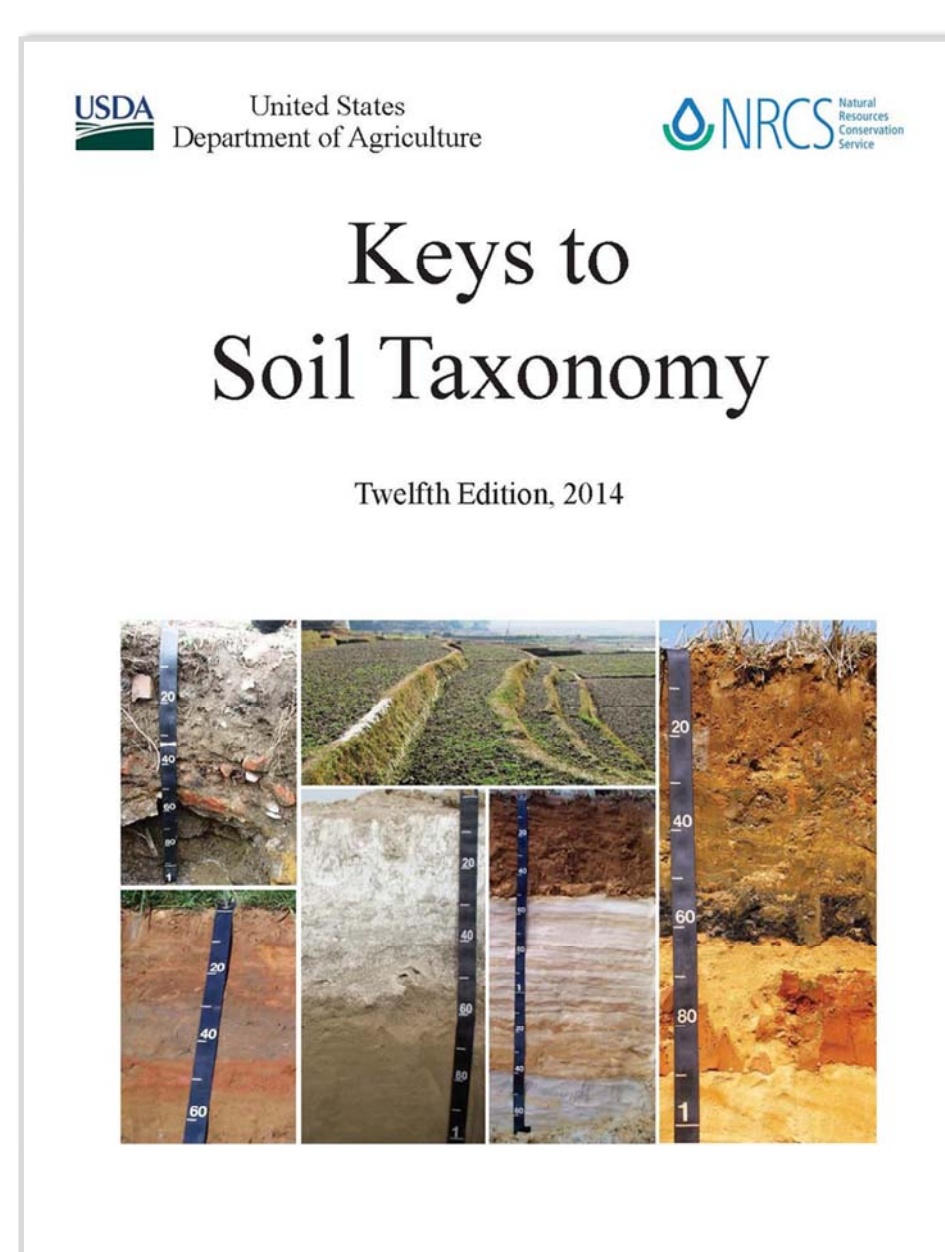
Other procedural manuals, field books, national instructions, and technical notes, including:

- Field Book for Describing and Sampling Soils (Version 3.0, 2013)

Field Book for Describing and Sampling Soils

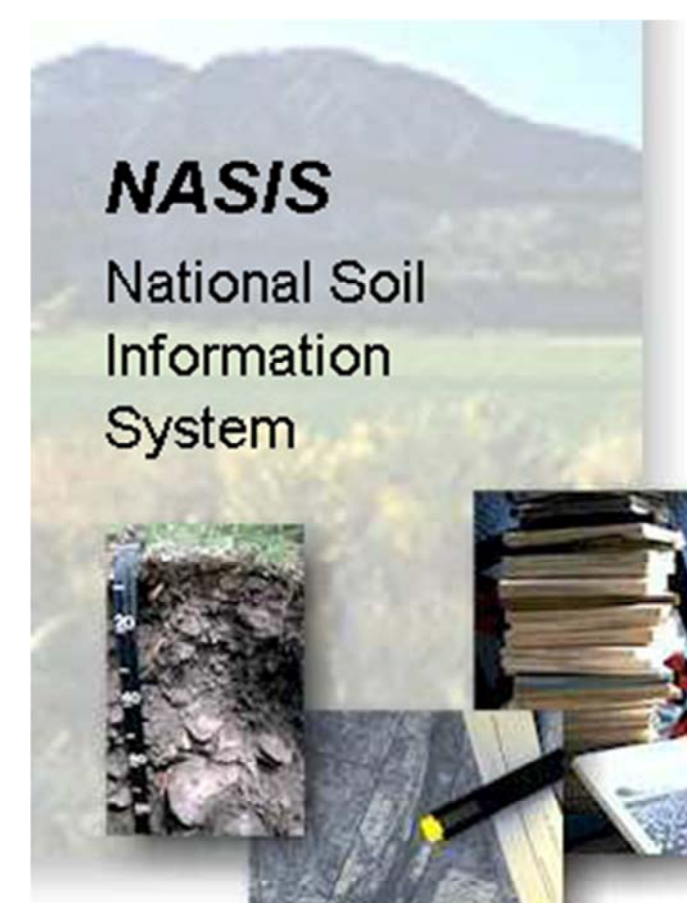
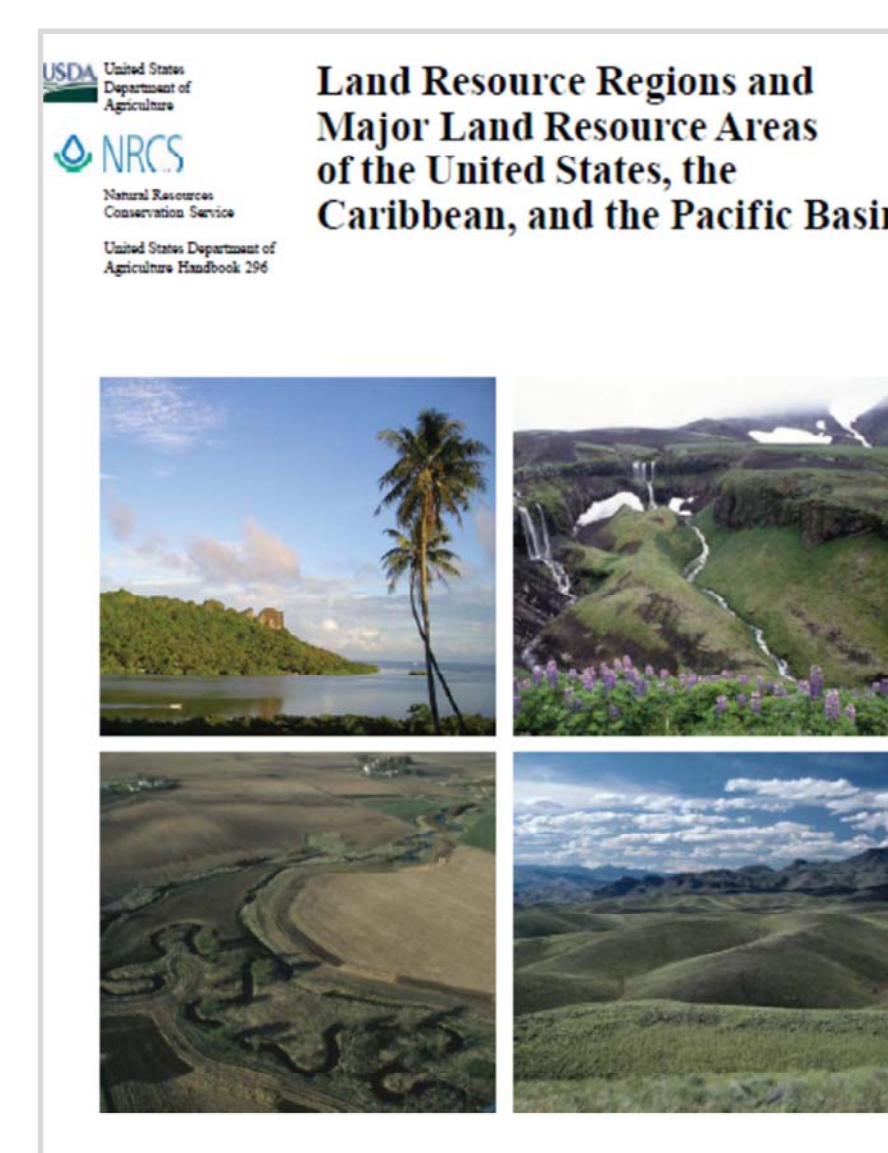


Version 3.0
National Soil Survey Center
Natural Resources Conservation Service
U.S. Department of Agriculture
September 2012



- Keys to Soil Taxonomy (12th edition, 2014)
- Field Soil Survey Laboratory Manual (SSIR#51, 2014)

- Major Land Resource Regions and Major Land Resource Areas (Ag. Handbook #296, 2006)
- National Instruction 305, 3rd edition (Soil Data Join and Recorrelation Initiative)



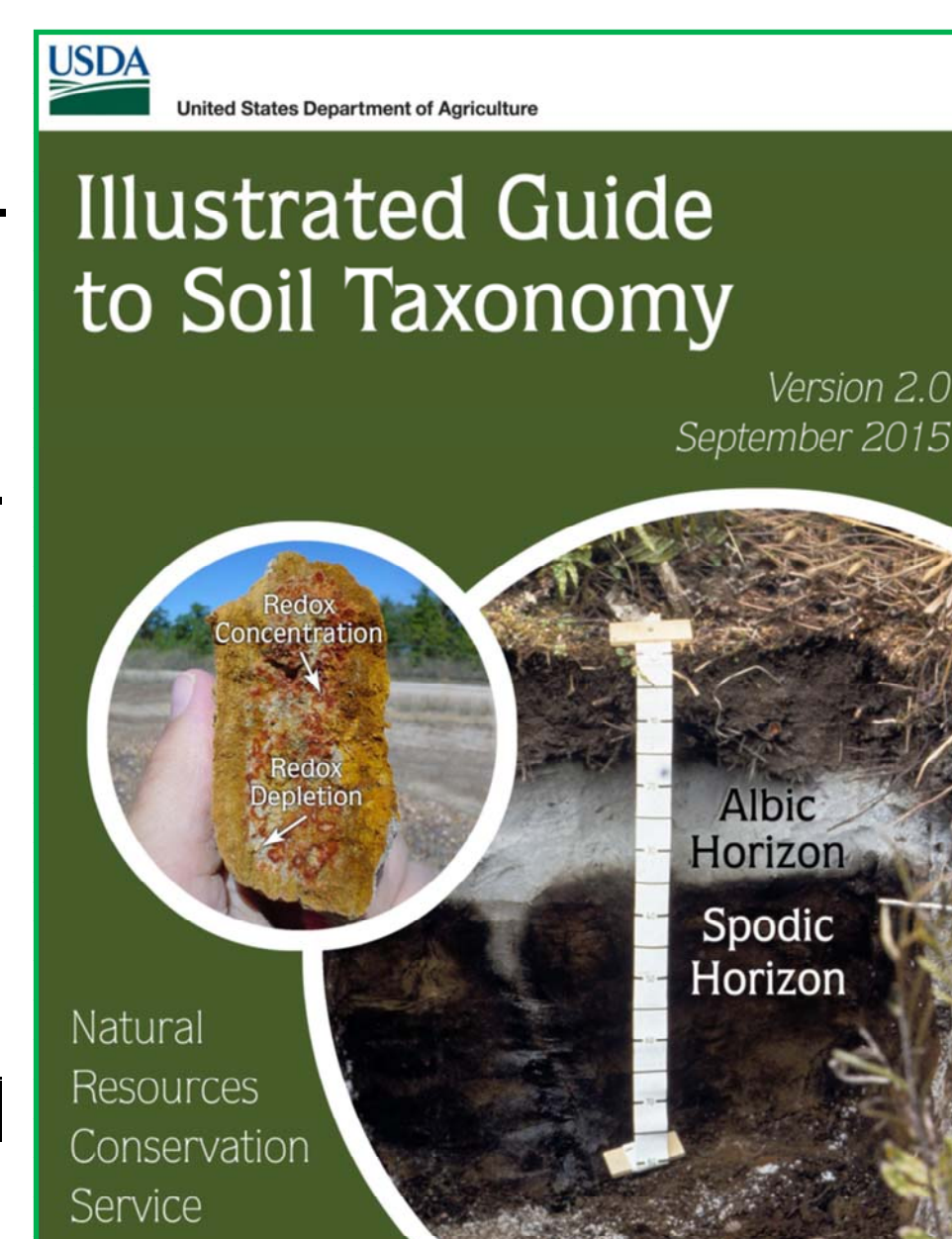
- NASIS User Guides (NASIS ver. 6.4, 2015)

Delivery, Training, and Integration

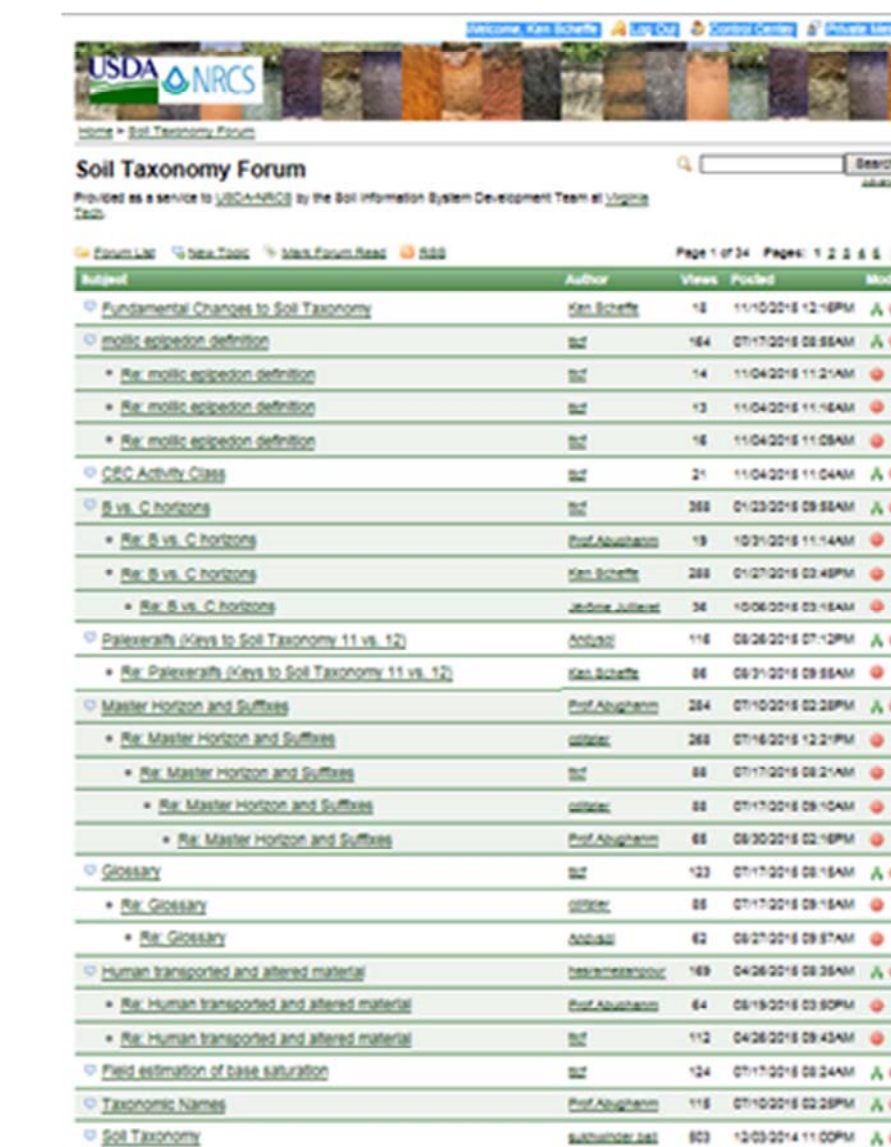
As documents and methodologies are updated and adopted as standards, they are integrated, through publications and training, into soil survey practices. Printed media continues to be a significant means of conveying standards. Digital and mobile media tools provide a ready reference that can be used in the formal classroom setting or in the field.

Many of the standards are highly technical and require expert experience in application. Training tools and supporting resources are developed to accompany the standards for learning by new scientists. These tools include:

- Illustrated Guide to Soil Taxonomy
- Pronunciation Guide to Soil Taxonomy



- Online training materials and documents
- Job aids, online modules, YouTube videos



- Soil Taxonomy Forum (Q&A)
- Guy Smith Interviews
- Publications and Circular Letters of International Committee Reports
- Online models and data sources (Newhall model, PRISM)
- NRCS Directives, national instructions, technical notes

<http://soiltaxnforum.stl.vt.edu/forum/list.php?3.page=1>

Maintenance and Update

The instructions, guidance, and policy provided in these documents are updated regularly to reflect current program requirements. The Soil Survey Manual is currently under revision. These documents are maintained on the soil survey webpages (soils.usda.gov). Changes and updates are posted for comment and review by users and members of the NCSS before they are integrated into standards and posted to the soils web site at <http://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/>.

Members are encouraged to conduct research, propose changes, and provide critical review of standard documents, policies, and operating procedures. Suggestions for new and updated standards are accepted from:

- Regional soil survey committees
- Data user groups
- Professional organizations and societies
- Scientific discipline groups
- Targeted task forces and work groups
- International organizations and committees (IUSS, ICOMTAX)
- Research and investigation reports
- Personal communications

Recommendations and proposals to adopt or amend specific standards of the NCSS should be sent to Dr. Curtis Monger, National Leader, Soil Survey Standards National Soil Survey Center, Lincoln, NE.

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