

Available Virtual Resources for Soils Training

- NCSS Training Course Materials. Use these files as “refresher training” for training you’ve taken in the past.
 - Available at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/edu/ncss/?cid=nrcs142p2_054324
- R Statistics Essential Training <https://aglearn.usda.gov/course/view.php?id=30886>
- Recommended curricula for specialty areas within the SPSPD
 - [Ecological Site Specialist](#)
 - [Geographic Information Specialist](#)
 - [Soil Scientist](#)
 - [Pathways](#)
- Videos and Webinars. If you have an idea for a webinar or series of webinars, please follow up with shawn.mcvey@usda.gov.
 - How-to videos on a variety of soil survey topics provide an excellent way to brush up on field and lab skills, or just learn what it is all about:
 - [von Post Scale of Humification](#) 
 - [Chemical Response](#) 
 - [How to Describe and Sample Fragments in the Field](#) 
 - [Using Web Soil Survey playlist](#) 
 - [How to Sample Bulk Density in the Field](#) 
 - [How to Differentiate and Identify Soil Horizons in the Field](#) 
 - [Video for Students of Soil Technology - Measurement and Data Evaluation](#) 
 - [How to Use the Field Book for Describing and Sampling Soils](#) 
 - [Virtual Tour of the Kellogg Laboratory](#) 
 - [1991 Newhall Simulation Model Run](#) 
 - [Water Movement in Soil](#) 
 - [Particle-Size Analysis by Hydrometer](#) 
 - Soil Survey Webinars and PowerPoints (100’s Available)
 - Videos and Webinars page available at : https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/edu/?cid=nrcs142p2_054315
 - Soil Business Systems
 - Digital Soil Mapping Webinar Series
 - Using R Powered Shiny Apps to Accelerate Soil Data Analysis

- Soil Quality and Ecosystems
 - Soil Health Conservation Webinars
 - O Horizons in Forest Soils
 - Soil Survey Interpretations
 - Soil Vulnerability Index for Cropland
 - Soil Health Interpretations
 - Soil Survey Research and Laboratory
 - Rapid Carbon Assessment
 - Soil Spectral Inference
 - Soil Survey Standards
 - Soil Survey Manual
 - Training Resources
 - Technical Soil Services
 - TSS Planning and Reporting
 - Working with the NSSC
 - Other Videos of Interest
 - Coastal Zone Soil Survey
 - Effective Science Communication
- NSSC YouTube Channel available at:
 - <https://www.youtube.com/user/nrcsnssc>
- S&T Training Library (Conservation Webinar Portal) Available at:
 - <http://conservationwebinars.net/>
 - Hundreds of on-demand webinars and weekly live sessions available with verification certificates available for Continuing Education Units (CEUs) and other professional society/conservation planner certification credit
- NASIS Training Materials
 - NASIS User Guide Available at
 - https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/tools/?cid=nrcs142p2_053545
 - NASIS Training Videos Available at
 - <https://www.youtube.com/channel/UCdHAmL4woeul8xduDUHfnKw>
- Job Aids (something that can be used on the job to improve performance)
 - [Classification](#)
 - [Correlation](#)
 - [GIS and Digital Soil Mapping for Soil Survey](#)
 - [Investigations](#)
 - [Operations & Management](#)

- [Photography](#)
 - [Promoting the Soil Survey](#)
 - [Soil Databases, General](#)
 - [Soil Databases, NASIS](#)
 - [Soil Survey Graphics](#)
 - [Technical Soil Services, Education](#)
 - [Technical Soil Services, General](#)
 - [Technical Writing](#)
 - [Other Job Aids](#)
- On-The-Job (OJT) Modules (100's Available) Includes instructions for adding completion to AgLearn. Available at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/edu/ncss/?cid=nrcs142p2_054325
 - Map Unit Design and Mapping Soils
 - Soil Describing
 - Soil Classification
 - Soil Survey Documentation
 - Sampling and Characterization
 - Soil Survey Information
 - Equipment Use and Operation
 - Ecological Inventory
 - Geophysical Tools
 - Soil Science for Non-Soil Scientists
 - Soil Survey for Non-Soil Scientists
 - Describing Soils for Non-Soil Scientists
- Review Technical Documents for Soil Survey. Increase your technical capability. Available at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/ref/>
 - [Policy and Procedure](#)
 - [National Soil Survey Handbook](#)
 - Technical Notes - specific technical subjects for soil scientists.
 - [Soil Survey Technical Notes](#)
 - [Hydric Soils Technical Notes](#)
 - [Soil Quality Technical Notes](#)
 - [Soil Quality - Agronomy Technical Notes](#)
 - [Soil Quality - Urban Technical Notes](#)
 - [Soil Quality - Soil Biology Technical Notes](#)
 - [Classification](#)
 - [Soil Taxonomy](#) - principal reference to soil classification.

- [Keys to Soil Taxonomy](#) - taxonomic keys for field classification.
 - [Guide to Pronouncing Taxonomic Terms](#)
 - [Part 614 National Soil Survey Handbook](#)
- [Soil Geography](#)
 - [Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin](#) (Ag Handbook 296)
- [Field Guides](#)
 - [Field Book for Describing and Sampling Soils](#)
 - [Field Guide to Classify Biological Soil Crusts for Ecological Site Evaluation](#)
 - [Field Indicators of Hydric Soils](#), version 8.2
- [Soil Survey Office Laboratory References](#)
 - [Soil Survey Field and Laboratory Methods Manual \(SSIR 51\)](#), version 2.0
 - [Particle-size analysis by hydrometer data entry forms](#)
 - [Material Safety Data Sheets \(MSDS\) and recommended chemical disposal procedure](#)
- [Laboratory Methods and Information](#)
 - [Lab Methods Manual \(SSIR 42\)](#)
 - [Soil Survey Laboratory Information Manual \(SSIR 45\)](#)
 - [A Routine Laboratory Method to Determine Phosphorus Availability, Capacity, and Release Characteristics for Soils \(SSIR 55\)](#)
 - [Testing Methods for Phosphorus and Organic Matter](#)
 - [Soil Sample Submission Protocol for the KSSL](#)
 - [Soil Sample Submission Worksheets](#)
- [Geomorphic Description System](#)
 - [Geomorphic Description System](#), version 5.0
 - Glossary of Landform and Geologic Terms (Part 629 of the National Soil Survey Handbook)
- [Geophysical Investigations](#)
 - [Trip Reports \(Jim Doolittle\)](#)
 - [Trip Reports \(Wes Tuttle\)](#)
- [Installing Monitoring Wells in Soils](#)
- [Forms](#)
- [National Soil Information System \(NASIS\)](#)
- [Land Use \(Title 310\)](#)
 - [National Land Evaluation and Site Assessment \(LESA\) Handbook](#)
 - [Land Evaluation \(LE\) part of LESA](#)
 - [Red Tart Cherry Site Inventory for Grand Traverse County, Michigan](#) (Unique Farmland Designations)

- [Site Assessment \(SA\) part of LESA](#)
- [Other References](#)
 - Glossaries of Soil-Related Terms