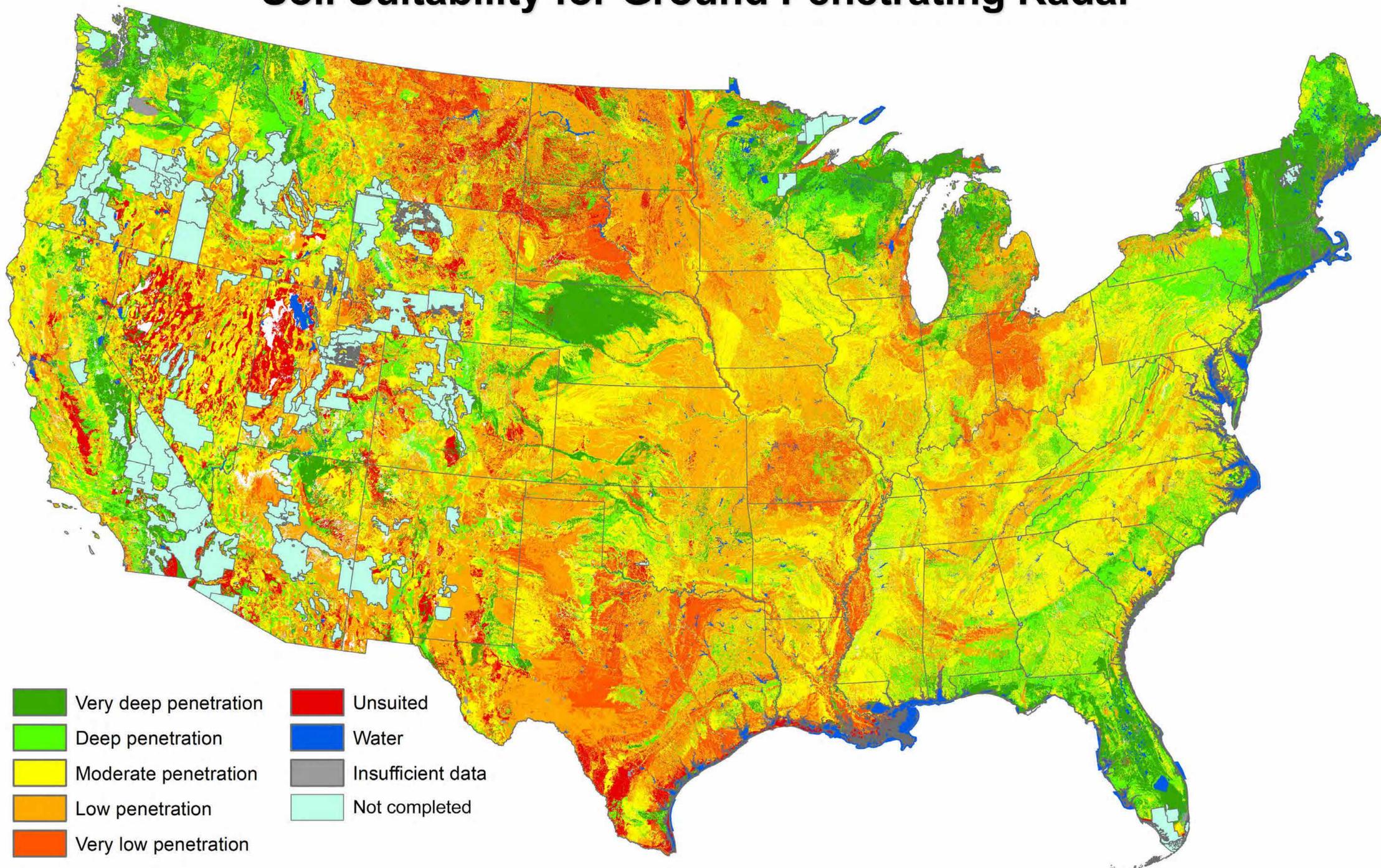


MAP OF THE MONTH

April

Soil Suitability for Ground Penetrating Radar



Soil Interpretations—A Multitude of Practical Information About the Land

This map shows the suitability of soils to be imaged using ground penetrating radar. The map was made by evaluating properties derived from soil mapping by the National Cooperative Soil Survey. This suitability rating is a “soil survey interpretation.” Interpretations predict soil behavior for specified soil uses and under specified soil management practices.

The role of interpretations in Soil Survey has evolved with time. In 1922, “The value of the soil survey depends on the extent to which it can be used by the people” stated Charles F. Shaw of California to the American Soil Survey Association. In contrast, 2 years later Soil Survey Chief Curtis Marbut wrote “The soil survey report is a scientific publication and should not attempt to give practical advice.”

Despite these differences in position, by the 1920s soil surveys were already being used by farmers and other private citizens; State experiment stations and extension services; Federal and State legislators; banks, life insurance companies, and real estate companies; large-scale commercial agricultural producers; chambers of commerce; State and local highway agencies; educational institutions; State forestry agencies and private timber companies; State and local boards of health; private and public engineering services; courts of law, public and private attorneys; electric power companies; newspapers; organizations in foreign nations; and Federal agencies, including the Forest Service, Geological Survey, Bureau of Public Roads, Interstate Commerce Commission, Department of War, Post Office, Bureau of Internal Revenue, Veterans Bureau, Bureau of Reclamation, and the Customs Service.

Modern soil surveys are both scientific publications and sources of practical advice in the form of soil interpretations. Currently, the USDA-NRCS Soil and Plant Science Division provides over 500 soil-based interpretations. The interpretations are presented as (1) *limitations*, such as a severe limitation of a soil for crop production because of a high water table, or as (2) *suitability* or *favorability* ratings, such as a fair favorability of a desert soil for the growth of certain microorganisms. The scale for interpretations ranges from field-level to national. Interpretations at the local field-level can be obtained by entering “Web Soil Survey” in a search engine. The concepts and rationale underlying soil interpretation are on-line in the “Soil Survey Manual.”