CHAPTER 11

IMPROVING SOIL SURVEY INTERPRETATIONS THROUGH RESEARCH

Gerald W. Olson

Research in soil survey interpretations seeks ways to improve use of soil maps and reports. Intensive use of soil surveys as resource inventories necessitates that we learn more about soils and their performance. To acquire this information, soil scientists who make soil maps need to combine forces with planners, engineers, and others who use soil maps.

This paper gives examples of the nature of an interdisciplinary approach to soil research, including an example of its application to problems of subsurface sewage disposal.

SOIL SURVEY

Interdisciplinary contributions have helped make study of soils a science. Many fields such as geology, geography, meteorology, botany, and chemistry have contributed to understanding of factors and processes that have formed soils. Soils, an integral part of our environment, are discrete bodies produced by interactions of climate and vegetation changing surficial geologic materials in geomorphic landscapes.

Interdisciplinary work is as important in application of soil information for practical purposes as it is in understanding theories of soil genesis. To build structures on soils, knowledge of soil characteristics must be combined with knowledge of planning, engineering, design, economics, and other disciplines that study man's use of land, in order to achieve harmonious and efficient land use.

A soil scientist making a soil map studies soil color, texture, structure, porosity, consistence, pH, organic matter, kind of clay, and other profile characteristics, and combines these with his knowledge of geomorphology, topography, vegetation, land use, and other landscape attributes to delineate different soil areas on maps. Soil map units are clearly defined in soil survey reports and can be used with confidence by planners and developers. In

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