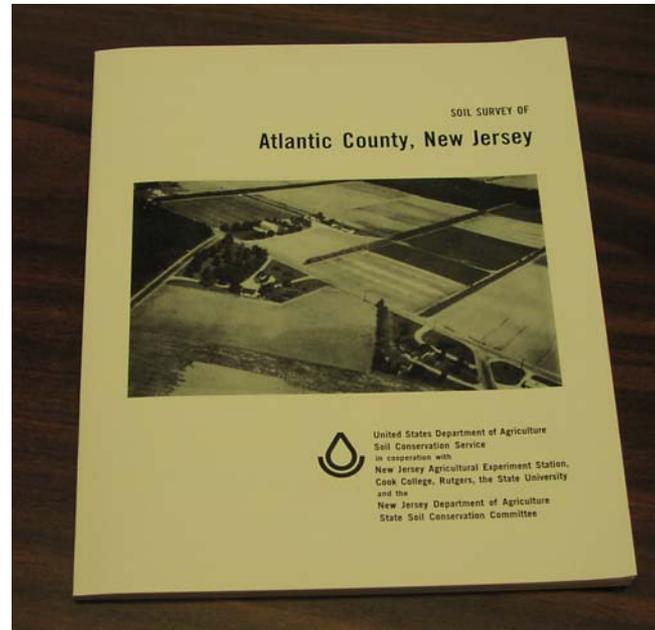


# How to Use a Soil Survey

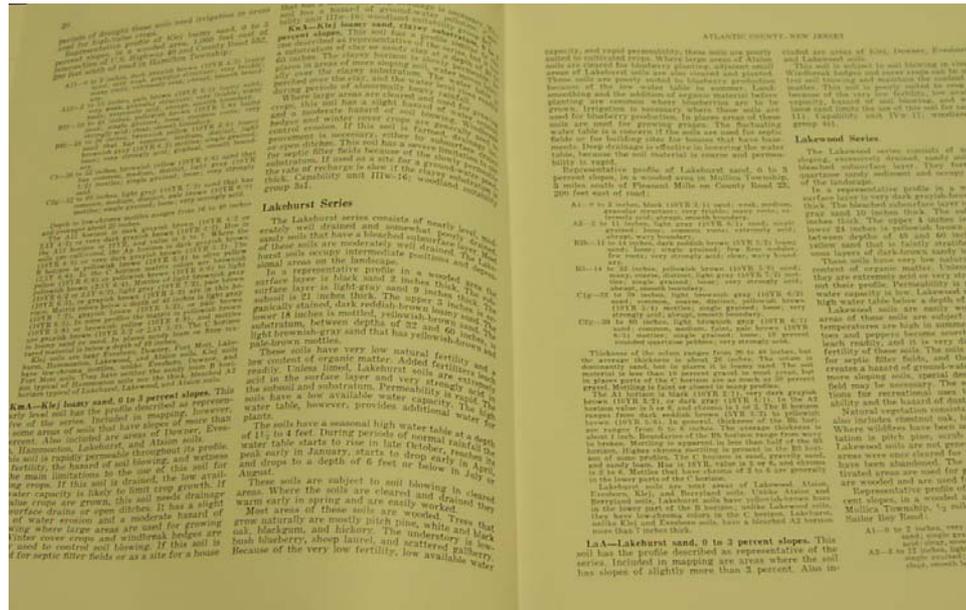
## An Introduction to the Soil Survey



Much of our life's activities are related and influenced by the behavior of the soil around our homes, roads, shopping centers, schools, farms, and forests. What is put on the land should be guided by the soil that is beneath it. For most counties a soil survey has been created, that describes the soil properties, and uses and limitations for those soils.

# How to Use a Soil Survey

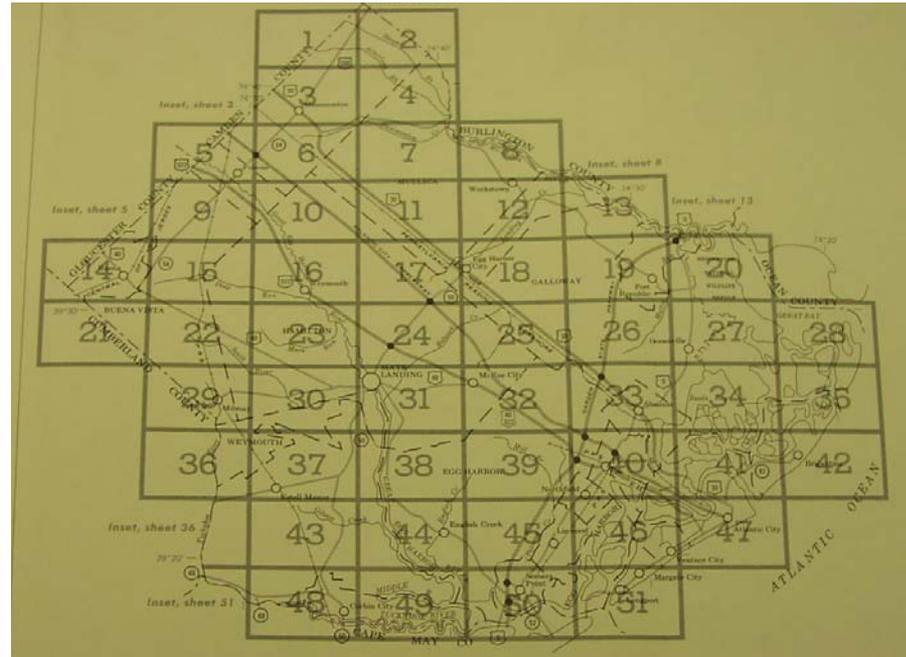
## A Soil Series



No two soils are exactly alike, but soils can be grouped that have similar properties and similar behavior. This is called a soil series. Series are generally named for a town, local landmark, or feature. The narrative section of the soil survey has a description of each soil series. Each description has information about that series, and a description of the soil profile.

# How to Use a Soil Survey

## The Soil Survey Map Index



A map index of the county is included within the soil survey to help you locate a parcel of land for which you want to identify the soil. The map index contains the location of major towns, state highways, and some county roads. Once you have found your general location on the index you can move to the numbered soil map to zone in on the property you are interested in.

# How to Use a Soil Survey

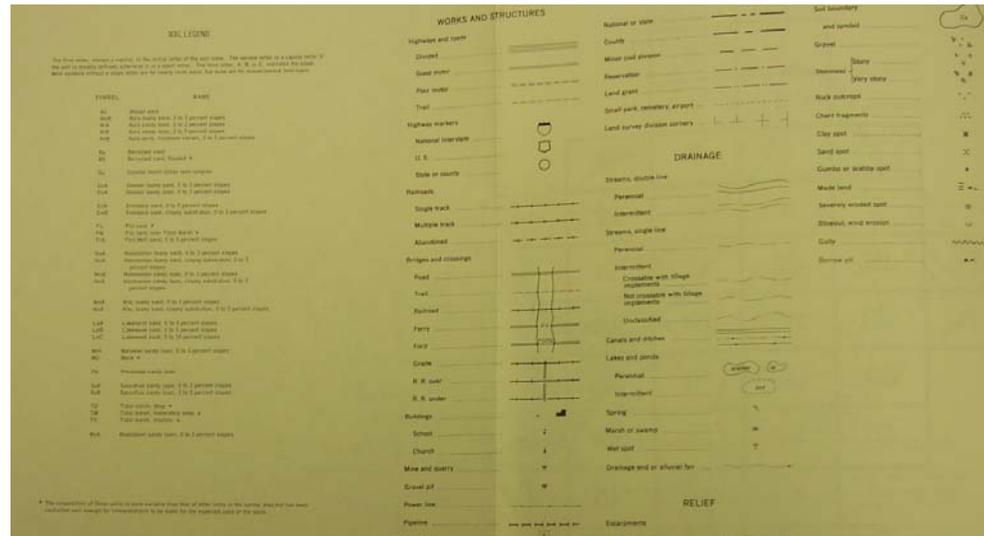
## The Soil Map



Soil series are mapped as an overlay onto aerial photographs of an area. The aerial photographs show land features and uses such as farms, forests, cleared areas, and developed areas. On the maps too are state and county roads, as well as some local roads. Names of towns, and municipal boundaries are also shown on the maps. This will make it easier to pinpoint the exact location of a property. The maps contain boundaries of soil series, and a symbol for the series. For example DoA is the soil series Downer loamy sand. The darker areas are generally wooded areas, the lighter areas are fields, cropland, and grassed areas.

# How to Use a Soil Survey

## Soil Legends and Map Symbols



The soil survey also contains a legend with the symbols for each soil. The symbol is not only an abbreviation of the soil series, but it also contains information on the slope. DoA is the symbol for Downer loamy sand. The “A” is for the slope. The legend also has symbols for streams, wet areas, gravel pits, and other features. Once you have your spot on the map, go to the legend to get the soil series name. After you have identified the name, go to the general soils description narratives.

# How to Use a Soil Survey

## Soil properties – limitations and uses

The image shows an open soil survey report. The left page contains a table with columns for 'Soil name and use symbol', 'Depth to seasonal high water table', 'Depth to bedrock', 'Soil texture', 'Soil color', 'Soil structure', 'Soil reaction', 'Soil permeability', 'Soil drainage', 'Soil limitations', and 'Soil uses'. The right page contains a table with columns for 'Percentage less than 2 inches passing sieve', 'Liquid limit', 'Plasticity index', 'Shrinkage limit', and 'Available water'. The tables are filled with data for various soil types and locations.

Once you have read the general soil description, you can get additional information from the engineering properties and other charts within the survey. You can determine the depth to seasonal high water tables, depths to bedrock, and other land use limiting factors. The tables also have information on limitations for septic systems, basements and roadways. All of these soil properties are needed when planning the development of a piece of land.