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MmE

SUPPLYS

TEXAS A&M UNIVERSITY

TEXAS AGRICULTURAL EXTENSION SERVICE

J. E. HUTCHISON, DIRECTOR, COLLEGE STATION, TEXAS

The National Cooperative Soil Survey provides for mapping, classifying and interpreting the soil resources of the United States. This program is under the leadership of the Soil Conservation Service, USDA, in cooperation with state experiment stations. In Texas, soil surveys are made by the Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station, Texas Highway Department, U.S. Forest Service and other agencies and is published on a county basis.

### WHAT IS A SOIL SURVEY?

A published soil survey provides a basic inventory of a county's soil resources. The report contains soil maps prepared on aerial photographs, a description of soil characteristics and land use. Soil interpretations provide a basis for decisions and predictions relative to:

- Suitability of soil for growing crops, trees and grasses.
- 2. Response of soil to management practices.
- Suitability of soil for foundations or as building material.
- Suitability of soil as road-bed material.
- Assessment value of land and associated property.
- Limitations affecting septic tank and disposal field operation.
- 7. Effect of soil on precipitation runoff.

Soil surveys help guide each county's future agricultural and industrial development. A growing state and national population and an expanding economy make sound land-use planning a must in Texas.

Soil surveys of thousands of individual farms and ranches are available in addition to published soil surveys. These are on file at local Soil Conservation offices.

## WHO USES SOIL SURVEYS?

Soil and Water Conservation district directors are responsible under state law for leadership in planning and carrying out conservation programs in each of the 188 districts in the state.

# SOIL SURVEYS

CLARENCE R. CARTER

Extension Soil and Water Conservation Specialist

Texas A&M University

Soil Conservation Service technicians assisting the districts use soil survey information as the basis for preparing farm and ranch conservation plans.

Farmers and ranchers use soil management information from soil survey reports in applying practices best suited to their soils and crops.

Watershed, irrigation and conservation districts use soils information to guide their action programs. They use soil interpretations to inform the community about problems and possible solutions.

Wildlife workers find soil surveys helpful in wildlife area improvement, pond building and location of recreation, hunting and fishing sites.

Lumber companies, pulp mills and foresters want to know the suitability of soils for producing various kinds of trees and shrubs.

Experiment Station and Extension personnel and vocational agriculture instructors need accurate information to predict how soils will respond to different management practices. Experiment stations use soils data in setting up research projects and as a basis of projecting their research findings to other areas. County agents and vocational agricultural teachers use soil surveys to help farmers and students make farm management decisions.

Educators, agricultural economists and other scientists use information on soils and soil conservation in scientific papers, talks, classroom instruction and research.

Public officials acquire land for schools, parks, reservoirs and other purposes. Soils information helps to determine the suitability and cost of land planned for use in specific projects.

Zoning commissions find the information helpful in urban planning. Soil surveys provide a basis for land use development in the best interest of public health, safety and welfare.

Land appraisers, credit agencies and investors use information on soils and soil productivity to assign property value relative to extending credit and as a basis for investments in farm, home or business sites. Soil survey data also can be used in tax assessments and equalization by community and county officials.

Real estate dealers, building contractors and subdivision developers use soil surveys to help solve problems with foundations, drainage, septic tank operation and landscaping.

Manufacturers and processors associated with farm supplies, equipment and produce use soils information in locating markets for their products and selecting sites for factories and processing plants. They are interested in areas capable of long-term economic production and utilization of farm and factory products.

Engineers want information about soils to help locate and design airports, radio and radar stations, dams and reservoirs, flood control, drainage and irrigation projects, roads and buildings. Highway departments and transportation companies want the best available right-of-way relative to soil compaction, drainage, sources of fill, freezing and thawing, making cuts, susceptibility of erosion and establishing vegetation.

Oil and gas companies use soils information to locate pipelines and plan for erosion and corrosion control along rights-of-way. Telephone and power companies have similar uses.

## WHERE IS SOIL INFORMATION OBTAINED?

When a soil survey is completed for a county, a report containing soil maps is published. Some new

reports are released each year and a standard soil survey is in progress in nearly every county. Contact your local Soil Conservation office, soil and water conservation district directors or county agricultural agent and determine the status of your county's soil survey. Learn to use your soil survey report just as soon as it is available. Participate in the soil survey education program offered in your county.

Since 1901, 129 soil surveys have been published; however, only 70 of these are currently available. Early day surveys were made on an area rather than a county basis using a scale of 1 inch equal to 1 mile. Reconnaissance surveys covered several counties that required a much smaller scale. New surveys, which began in 1958, are mapped on a large scale of 4 inches per mile which is sufficient for detailed planning.

The following areas were mapped before the county survey: Vernon 1902 and Wilbarger County 1959, Nacogdoches 1903 and Nacogdoches County 1925, Jacksonville 1903 and Cherokee County 1949, San Antonio 1904 and Bexar County 1962, Waco 1905 and McLennan County 1952, Brownsville 1907 and Cameron County 1923, Corpus Christi 1908 and Nueces County 1960.

Only six counties have been remapped. These are: Houston 1905 and 1925, Henderson 1906 and 1923, Ellis 1910 and 1961, Jefferson 1913 and 1960, Brazos 1914 and 1951, Collin 1935 and 1969.

## SOIL SURVEYS IN TEXAS

- \*1901 Willis area-Montgomery
- \*1902 Vernon area-Wilbarger County
- \*1902 Brazoria area-Brazoria County
- \*1903 Woodville area-Tyler County
- \*1903 Nacogdoches area-Nacogdoches County
- \*1903 Lufkin area-Angelina County
- \*1903 Paris area-Lamar County
- \*1903 Jacksonville area-Cherokee County
- \*1904 Anderson
- \*1904 San Antonio area-Bexar County
- \*1904 Austin area-Travis County
  - 1905 Houston
- \*1905 Lavaca
- \*1905 Lee
- \*1905 Waco area-McLennan County
- \*1906 Laredo area-Webb County

- \*1906 Henderson
- \*1906 San Marcos area-Hays County
- \*1907 Robertson
- \*1907 Bastrop
- \*1907 Brownsville area-Cameron County
- \*1907 Cooper area-Delta County
- \*1907 Wilson \*1908 Camp
- \*1908 Corpus Christi area-Nueces County
- \*1908 Franklin
- \*1909 Gravson \*1909 Morris
- \*1909 Titus \*1909 Reconnaissance South
- \*1910 Ellis
- \*1910 Reconnaisance Panhandle
- \*1910 Reconnaissance Central Gulf Coast
- \*1911 Reconnaissance Southwest
- \*1912 Archer
  - \*1912 Harrison 1913
  - 1913 Washington 1915
  - \*1913 Jefferson
  - \*1913 Reconnaissance South Central
- 1914 Brazos
- \*1915 Taylor 1918
- 1915 Smith 1917
- 1916 Bell 1916
- 1916 Eastland 1916
- 1916 San Saba \*1917 Lubbock 1920
- \*1918 Bowie 1921
- \*1918 Denton 1922
- \*1918 Freestone 1921
- 1919 Red River 1923
- \*1919 Reconnaissance Northwest 1922
- \*1920 Dallas
- \*1920 Erath 1923
- \*1920 Tarrant
- 1922 Coleman 1926
- 1922 Dickens 1926 1922 Harris
- \*1922 Reeves 1926
- 1922 Reconnaissance West Central
- 1923 Cameron
- \*1923 Rockwall 1926
- \*1923 Henderson 1929
- \*1924 Wichita 1929
- 1925 Houston

- 1925 Hidalgo
- \*1925 Milam 1930
- \*1925 Nacogdoches 1930
- \*1926 Navaro 1930
  - 1926 Willacy 1938
  - 1927 Victoria 1931
- 1928 Midland 1933
- \*1928 Van Zandt
- \*1928 Reconnaissance Trans-Pecos Area 1934
- 1924 Frio 1934
- \*1929 Potter 1934
- 1930 Collin 1935
- 1930 Galveston 1935
- 1930 Polk 1935
- 1930 Randall 1935
- 1931 Scurry
- \*1931 Soils of Texas
  - 1932 Bee 1932
  - 1932 Falls 1936
- 1932 Hardeman 1936
- 1932 Wheeler 1936
- 1933 Cass 1937
- 1934 Hunt 1939
- 1934 Williamson 1938
- 1934 Zavalla 1940
- 1936 Kaufman 1940
- \*1936 Maverick 1942
  - 1938 Dimmit 1943
  - 1938 Fannin 1946
  - 1939 Brown 1948

1959 Terry 1962

<sup>\*</sup>Indicates surveys out of print. Date indicates year field work completed. Second date indicates published report.

NEW SERIES	
1942 McLennan 1958	1959 Wilbarger 1962
1948 Cherokee 1959	1960 Childress 1963
1951 Brazos 1958	1960 Cochran 1964
1953 Lynn 1959	1960 Jefferson 1965
1955 Fort Bend 1960	1960 Neuces 1965
1957 Dawson 1960	1960 Yoakum 1964
1957 Hansford 1960	1961 Armstrong 1965
1958 Haskell 1961	1961 Crosby 1966
1959 Bailey 1963	1961 Ellis 1964
1959 Carson 1962	1961 Fisher 1966
1959 Lamb 1962	1961 Foard 1964

1961 Gaines 1965

1961 Hockley 1965 1963 Bexar 1966 1962 Gray 1966 1963 Hall 1967 Kinney 1967 Menard 1967 Deaf Smith 1968 Sutton 1968 Collin 1969 Howard 1969 Mitchell 1969

#### Mitchell 1969



Section of land in Childress County Soil Survey on U.S. Highway 83 North adjoining Collingsworth County

#### **LEGEND OF SOIL TYPES**

VcB-Vernon-Weymouth clay loams, 1-3 percent slopes VcC-Vernon-Weymouth clay loams, 3-5 percent slopes MmB-Miles loam, 1-2 percent slopes

MfB-Miles fine sandy loam, 1-3 percent slopes

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