



United States
Department of
Agriculture



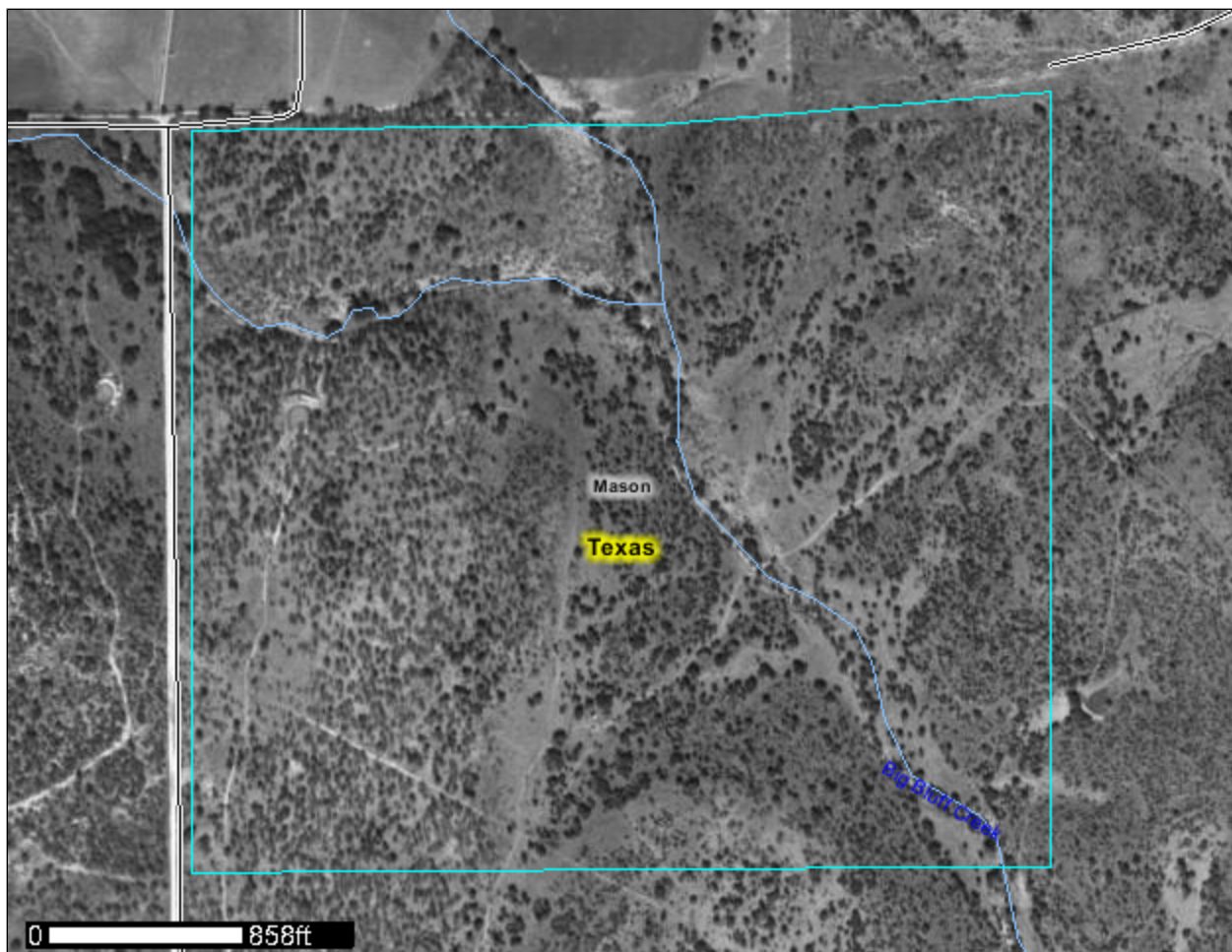
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Mason County, Texas

Property Soils



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

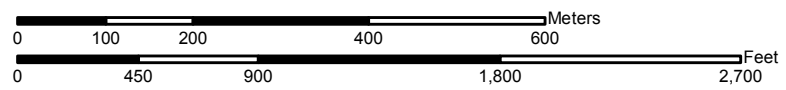
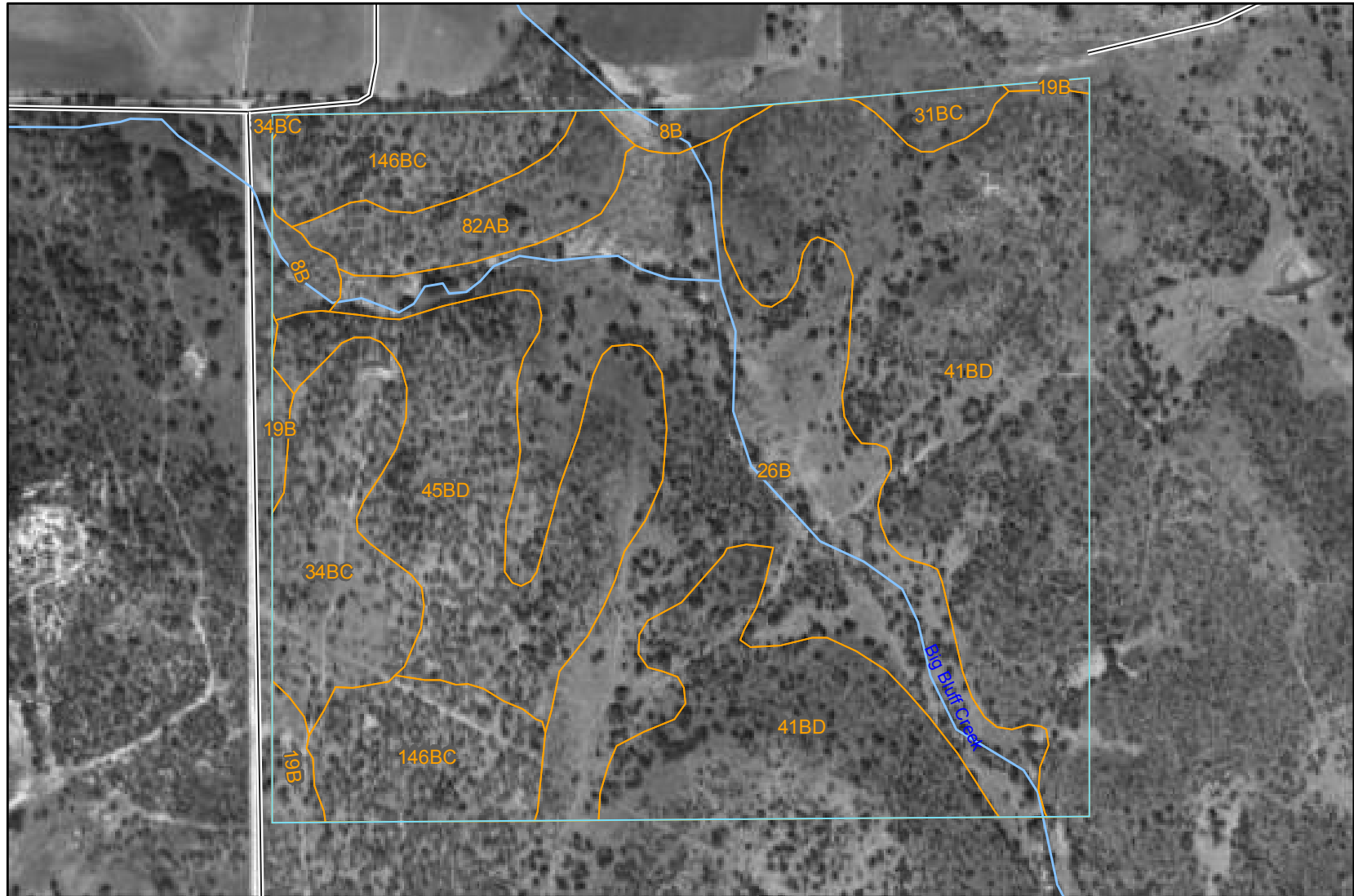
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report
Soil Map



Custom Soil Resource Report Legend

MAP LEGEND






















Area of Interest (AOI)




 Area of Interest (AOI)

Soils




 Soil Map Units

Special Point Features

 Blowout
 Borrow Pit
 Clay Spot
 Closed Depression
 Gravel Pit
 Gravelly Spot
 Landfill
 Lava Flow
 Marsh
 Mine or Quarry
 Miscellaneous Water
 Perennial Water
 Rock Outcrop
 Saline Spot
 Sandy Spot
 Severely Eroded Spot
 Sinkhole
 Slide or Slip
 Sodic Spot
 Spoil Area
 Stony Spot



 Very Stony Spot
 Wet Spot
 Other

Special Line Features



 Gully
 Short Steep Slope
 Other

Political Features

Municipalities

 Cities
 Urban Areas






Water Features

 Oceans
 Streams and Canals

Transportation

 Rails

Roads

 Interstate Highways
 US Routes
 State Highways
 Local Roads
 Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mason County, Texas
 Survey Area Data: Version 9, Sep 12, 2007

Date(s) aerial images were photographed: 1995

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Mason County, Texas (TX319)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8B	Nukrum clay, 1 to 3 percent slopes	4.7	1.7%
19B	Menard fine sandy loam, 1 to 3 percent slopes	3.8	1.4%
26B	Pontotoc fine sandy loam, 1 to 3 percent slopes	74.7	26.6%
31BC	Shep fine sandy loam, 1 to 5 percent slopes	2.8	1.0%
34BC	Campair sand, 1 to 5 percent slopes	19.3	6.9%
41BD	Yates-Rock outcrop complex, 1 to 8 percent slopes, very stony	100.3	35.7%
45BD	Nebgen-Oben complex, 1 to 8 percent slopes, stony	38.4	13.7%
82AB	Loneoak sand, 0 to 3 percent slopes	11.1	3.9%
146BC	Campair loamy sand, 1 to 5 percent slopes	26.1	9.3%
Totals for Area of Interest (AOI)		281.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Mason County, Texas

8B—Nukrum clay, 1 to 3 percent slopes

Map Unit Setting

Elevation: 1,150 to 1,950 feet

Mean annual precipitation: 25 to 29 inches

Mean annual air temperature: 63 to 66 degrees F

Frost-free period: 220 to 240 days

Map Unit Composition

Nukrum and similar soils: 100 percent

Description of Nukrum

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from limestone

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Available water capacity: High (about 10.6 inches)

Interpretive groups

Land capability (nonirrigated): 2e

Ecological site: Clay Loam PE 31-44 (R081BY326TX)

Typical profile

0 to 15 inches: Clay

15 to 51 inches: Clay

51 to 72 inches: Silty clay loam

19B—Menard fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

Elevation: 1,000 to 2,500 feet

Mean annual precipitation: 22 to 34 inches

Mean annual air temperature: 64 to 70 degrees F

Frost-free period: 210 to 260 days

Map Unit Composition

Menard and similar soils: 100 percent

Description of Menard

Setting

Landform: Plains

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Residuum and/or formed from ancient calcareous loamy alluvium

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: Moderate (about 9.0 inches)

Interpretive groups

Land capability (nonirrigated): 2e

Ecological site: SANDY LOAM PE 31-44 (R082XY373TX)

Typical profile

0 to 10 inches: Fine sandy loam

10 to 30 inches: Sandy clay loam

30 to 80 inches: Clay loam

26B—Pontotoc fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

Elevation: 1,000 to 1,900 feet

Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 64 to 66 degrees F

Frost-free period: 215 to 235 days

Map Unit Composition

Pontotoc and similar soils: 100 percent

Description of Pontotoc

Setting

Landform: Hillslopes

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: 60 to 80 inches to paralithic bedrock

Drainage class: Well drained

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Land capability (nonirrigated): 3e
Ecological site: RED SANDY LOAM PE 31-44 (R082XY369TX)

Typical profile

0 to 33 inches: Fine sandy loam
33 to 67 inches: Sandy clay loam
67 to 70 inches: Bedrock

31BC—Shep fine sandy loam, 1 to 5 percent slopes

Map Unit Setting

Elevation: 1,200 to 2,300 feet
Mean annual precipitation: 21 to 34 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 210 to 230 days

Map Unit Composition

Shep and similar soils: 100 percent

Description of Shep

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Slope alluvium derived from limestone

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 4e
Ecological site: SANDY LOAM PE 31-44 (R082XY373TX)

Typical profile

0 to 38 inches: Loam
38 to 80 inches: Loam

34BC—Campair sand, 1 to 5 percent slopes

Map Unit Setting

Elevation: 1,100 to 1,700 feet

Mean annual precipitation: 22 to 28 inches

Mean annual air temperature: 64 to 66 degrees F

Frost-free period: 215 to 230 days

Map Unit Composition

Campair and similar soils: 100 percent

Description of Campair

Setting

Landform: Hillslopes

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent

Sodium adsorption ratio, maximum: 2.0

Available water capacity: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 3e

Ecological site: SANDY LOAM PE 31-44 (R082XY373TX)

Typical profile

0 to 12 inches: Sand

12 to 17 inches: Loamy sand

17 to 34 inches: Sandy clay loam

34 to 40 inches: Bedrock

41BD—Yates-Rock outcrop complex, 1 to 8 percent slopes, very stony

Map Unit Setting

Elevation: 300 to 8,700 feet

Mean annual precipitation: 10 to 35 inches

Mean annual air temperature: 52 to 73 degrees F

Frost-free period: 120 to 320 days

Map Unit Composition

Yates and similar soils: 85 percent
Rock outcrop: 15 percent

Description of Yates

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Properties and qualities

Slope: 1 to 8 percent
Surface area covered with stones and boulders: 44.0 percent
Depth to restrictive feature: 4 to 14 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water capacity: Very low (about 0.5 inches)

Interpretive groups

Land capability (nonirrigated): 7s
Ecological site: Very Shallow PE 31-44 (R081BY354TX)

Typical profile

0 to 6 inches: Very flaggy loam
6 to 24 inches: Bedrock

Description of Rock Outcrop

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Limestone

Properties and qualities

Slope: 1 to 8 percent
Depth to restrictive feature: 0 to 2 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)

Interpretive groups

Land capability (nonirrigated): 8s

Typical profile

0 to 80 inches: Bedrock

45BD—Nebgen-Oben complex, 1 to 8 percent slopes, stony

Map Unit Setting

Elevation: 1,000 to 2,200 feet

Mean annual precipitation: 24 to 30 inches

Mean annual air temperature: 64 to 68 degrees F

Frost-free period: 215 to 235 days

Map Unit Composition

Nebgen and similar soils: 66 percent

Oben and similar soils: 34 percent

Description of Nebgen

Setting

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 1 to 8 percent

Surface area covered with stones and boulders: 1.0 percent

Depth to restrictive feature: 4 to 14 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.3 inches)

Interpretive groups

Land capability (nonirrigated): 7s

Ecological site: SANDSTONE HILL PE 31-44 (R082XY371TX)

Typical profile

0 to 11 inches: Stony fine sandy loam

11 to 15 inches: Bedrock

Description of Oben

Setting

Landform: Hillslopes

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 1 to 5 percent

Surface area covered with stones and boulders: 1.0 percent

Depth to restrictive feature: 9 to 20 inches to paralithic bedrock

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Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very low (about 2.2 inches)

Interpretive groups

Land capability (nonirrigated): 6s
Ecological site: RED SANDY LOAM PE 31-44 (R082XY369TX)

Typical profile

0 to 5 inches: Stony fine sandy loam
5 to 19 inches: Sandy clay loam
19 to 30 inches: Bedrock

82AB—Loneoak sand, 0 to 3 percent slopes

Map Unit Setting

Elevation: 1,100 to 1,700 feet
Mean annual precipitation: 22 to 28 inches
Mean annual air temperature: 64 to 66 degrees F
Frost-free period: 215 to 230 days

Map Unit Composition

Loneoak and similar soils: 100 percent

Description of Loneoak

Setting

Landform: Plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 3 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water capacity: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: SANDY PE 31-44 (R082XY372TX)

Typical profile

0 to 5 inches: Sand
5 to 21 inches: Loamy sand
21 to 57 inches: Sandy clay loam
57 to 60 inches: Bedrock

146BC—Campair loamy sand, 1 to 5 percent slopes

Map Unit Setting

Elevation: 1,100 to 1,700 feet
Mean annual precipitation: 22 to 28 inches
Mean annual air temperature: 64 to 66 degrees F
Frost-free period: 215 to 230 days

Map Unit Composition

Campair and similar soils: 100 percent

Description of Campair

Setting

Landform: Hillslopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from sandstone

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: SANDY PE 31-44 (R082XY372TX)

Typical profile

0 to 12 inches: Loamy sand
12 to 17 inches: Loamy sand
17 to 34 inches: Sandy clay loam
34 to 44 inches: Bedrock

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