

Kansas State Soil

Harney Silt Loam

What's So Important About Soil?

Soil is Kansas' most valuable resource. Combined with the state's climate and water supply, soil supports our No. 1 industry – agriculture. Agriculture contributes nearly \$8.7 billion each year to the Kansas economy.

How Did Our Soils Become So Good?

The Kansas state soil evolved under prairie grasslands and over time developed the rich, deep topsoil used by farmers and ranchers today. The vast grassland sea gave way to the plow as pioneers sought to raise grain crops for themselves and their livestock. It has the right soil quality, growing season, and moisture supply to produce sustained high crop yields when modern agricultural methods are used. Kansas soils are known around the world for their exceptional qualities.

Why A State Soil?

Due to the state's unique soil legacy and the completion of the state's most comprehensive soil inventory by the USDA Natural Resources Conservation Service, it was proposed that a typical prairie soil be selected to serve as an acknowledgment to the great agricultural heritage in Kansas. It also serves as a standard against which other soils can be compared.

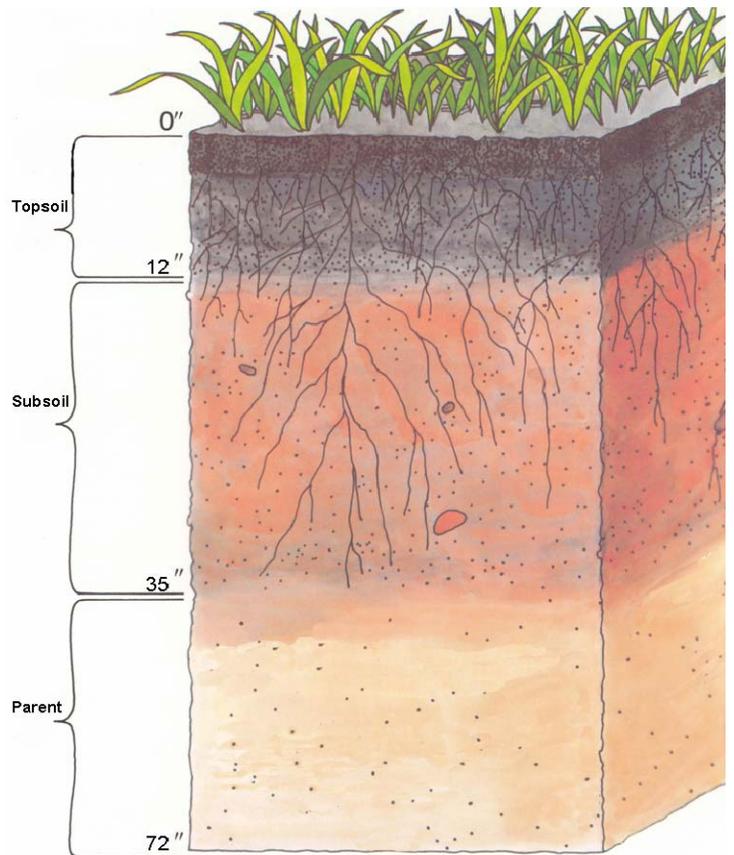
Why Harney Silt Loam?

Harney silt loam depicts all the desirable qualities of an ideal prairie soil, and it is the most extensive soil in the state covering 3,976,000 acres in westcentral Kansas. A variety of cash crops, irrigated and dryland, are raised on Harney silt loam. Livestock gets its food directly from this soil.

What is Harney Silt Loam?

Harney is a very deep, nearly level to moderately sloping, well-drained soil on flat ridgetops and sideslopes. Harney soils formed in wind-blown silts called "loess."

This soil typically has a dark grayish-brown silt loam topsoil layer about 12 inches deep. Below this lies the subsoil layer that is about 23 inches thick. The upper part of the subsoil layer is grayish-brown silty clay loam, and the lower part is brown, calcareous silty clay loam. The parent layer is 35 to 72 inches deep and is a yellowish-brown, calcareous silt loam with a few chalky sediments (see profile above).



Harney Silt Loam Profile

The Roots of a Great State – Our Soil

Did You Know?

Harney silt loam, state map unit symbol 2612, was adopted as the Kansas State Soil on April 12, 1990, when Governor Mike Hayden signed Senate Bill 96.

Kansas was the seventh state to name a state soil. It took five years through a strong grassroots effort to get Harney named as the state soil.

Harney silt loam possesses the ideal qualities of a prairie soil. Prime farmland has the best combination of physical and chemical characteristics for producing food and fiber. Kansas has more acres of prairie soils than any other state. Harney silt loam covers almost four million acres in 26 westcentral Kansas counties.

Kansas has over 300 different soil types across its 52 million-acre surface area. Crop acres account for just over 26.6 million acres or 50 percent, while range and pasture lands account for over 18 million acres or 34 percent. Nearly 25 million of the 52 million total acres (48 percent) are considered prime farmlands. *

Kansas soils directly impact the economic well-being of its people providing nearly \$8.7 billion in annual income. Kansas is one of the nation's leading agricultural states. In the year 2004, Kansas was number one in all wheat produced, sorghum grain produced, and cattle slaughtered. It ranked second in sorghum silage produced, acres of cropland and prime farmland, as well as cattle and calves on farms. It ranked third in red meat production, cattle and calves on grain feed, sunflowers produced, commercial grain storage capacity, and acres of land in farm. Kansas ranked sixth in agricultural exports. Other Kansas crops include soybeans, corn, and dry edible beans. Growing in importance to Kansas agriculture is cotton. **

Soils in every Kansas county have been identified and mapped. Since 2005, soil survey information is available for all counties on the Kansas NRCS Web site. To access, go to www.ks.nrcs.usda.gov, under "Information About", click on "Soils." Under this section, look for the Soil Data Viewer or Web Soil Survey.

Why Do You Need To Care About Kansas Soil?

Even though Kansas has a great agricultural heritage and is blessed with abundantly rich soils, soil erosion by wind and water continue to eat away at our food and fiber production base.

About 190 million tons of Kansas topsoil are degraded each year through activities by people. Five tons of topsoil spread over an acre is about the thickness of a dime or 3/32 inch.

Soils are not easily renewed in Nature. It takes about 500 years for an inch of topsoil to develop under prairie grasses. Unprotected crop fields can lose an inch of topsoil in just one or two years if exposed to wind erosion and heavy rains.

Farmland is threatened in every state, and once lost, it cannot be easily replaced. With 945 million acres--300 million of them prime land--in production nationwide, agriculture is the country's dominant land use. Sources that monitor the status of farming in America indicate that the country is losing as many as 1 million acres per year of prime farmland. ***

For more information, contact the Natural Resources Conservation Service (NRCS) at your local USDA Service Center (listed in the telephone book under United State Government). More information is also available on the Kansas Web site at www.ks.nrcs.usda.gov.

* *Natural Resources Inventory, USDA Natural Resources Conservation Service*

** *Kansas Department of Agriculture*

*** *Iowa State University, University Extension*

