

Approved Ginger Barr  
February 13, 1990 Date

MINUTES OF THE HOUSE COMMITTEE ON FEDERAL AND STATE AFFAIRS

The meeting was called to order by Representative Ginger Barr at  
Chairperson

1:33 ~~am~~/p.m. on February 8, 1990 in room 526-S of the Capitol.

All members were present except:  
Representative Peterson

Committee staff present:

Mary Galligan, Kansas Department of Legislative Research  
Lynne Holt, Kansas Department of Legislative Research  
Mary Torrence, Revisor of Statutes' Office  
Juel Bennewitz, Secretary to the Committee

Conferees appearing before the committee:

Senator Lana Oleen  
Orville Bidwell, Professor Emeritus, Kansas State University  
Vernon Hamilton, Soil Scientist, SCS, retired  
Kenneth Kern, Executive Director State Conservation Commission  
Joyce Wolf, Kansas Audubon Council

HB 2690

Representative Sprague moved to recommend the bill favorably for passage, seconded by Representative Jenkins. The motion was adopted.

HB 2695

Representative Jenkins moved to adopt the amendment presented by the KBI at the February 6, 1990, meeting. Representative Sprague seconded the motion which was then adopted. Representative Sprague made a motion to recommend the bill, as amended, favorably for passage, seconded by Representative Jones. The motion was adopted.

HB 2712

Staff explained previous action by the legislature amended the same section of the law twice. The language of this bill is technical and necessary for clean-up. Representative Bryant moved to report the bill favorably for passage, seconded by Representative Sprague. The motion was adopted.

HB 2714

Staff explained the bill would permit necessary clean-up for also having the same section amended twice.

Chairman Barr recognized Jim Conant, Alcohol Beverage Control Board, present as an informational reference. After brief discussion of terminology used in lines 38-39, Representative Douville moved to change the language to "licensee will forfeit all fees". Representative Roper seconded the motion which was then adopted.

Representative Sebelius moved to recommend HB 2714, as amended, favorably for passage, seconded by Representative Jenkins. The motion carried.

SB 96

Senator Karr submitted written testimony asking for the committee's support of the bill, Attachment No. 1.

Senator Oleen spoke in support of the bill noting the support it received in the Senate and that Harney silt loam is under consideration as the national official soil, Attachment No. 2.

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Federal and State Affairs,  
room 526-S, Statehouse, at 1:33 ~~xxx~~/p.m. on February 8, 1990

Professor Bidwell presented rationale for adopting a state soil and facts about Kansas soils, Attachment No. 3.

Vernon Hamilton supported the bill and described technical characteristics of Harney silt loam, Attachment No. 4.

Committee discussion:

Mr. Hamilton explained the various soils across the state are reflective of the varied rain pattern in the state. The rainfall distribution, climatic conditions and different soil textures preclude there being one soil type for the entire state.

Professor Bidwell presented a packet of materials, Attachments 5A - 5J which he reviewed item by item for the committee.

Kenneth Kern spoke as a proponent of the bill presenting the State Conservation Commission's views, Attachment No. 6.

Committee discussion:

1. Mr. Kern predicted no fiscal impact of the adoption of a state soil. He advocated no new printing of current information to include the state soil, rather phase it in as new materials are printed.
2. Mr. Kern responded to a member's question that there is not another soil found in more counties than Harney silt loam nor one more productive.

Joyce Wolf presented the Audubon Council's statement in support of the soil's importance particularly as it relates to environmental issues, Attachment No. 7.

George Jorgensen, District Conservationist, Doniphan County, introduced students from various parts of the state. Chairman Barr recognized the number of letters she received from students in support of the bill.

HB 2712

Representative Sebelius moved to amend the original motion to recommend the bill favorably to put the bill on the consent calendar. Representative Douville seconded the motion which was then adopted.

Chairman Barr appointed Representative Eckert to chair a subcommittee for further study of HB 2292. Members of the subcommittee are Representatives Gjerstad and Cates.

Representative Aylward made a motion to approve minutes of the January 24, 1990, meeting, seconded by Representative Jenkins. The motion carried.

Attachment No. 8 is material requested from SRS regarding statistics of children available for adoption.

The meeting adjourned at 2:25 p.m. The next meeting of the committee will be February 12, 1990, 1:30 p.m. in Room 526-S.

GUEST LIST

FEDERAL & STATE AFFAIRS COMMITTEE

DATE February 8, 1990

(PLEASE PRINT)

NAME	ADDRESS	WHO YOU REPRESENT
Jean Hamilton	Salina, KS	Harney for State Soil
ROSE H. BIDWELL	MANHATTAN, KS	HARNEY ST. SOIL
Brent Jeschke FFA	Highland, KS	Harney st. soil
Graig Jeschke FFA	Highland, KS	Harney St. Soil
Heath Whetstone 5th	Troy, KS	Harney Silt
Corey Miller 6TH	Wathena, KS	Harney Silt
Joe Ramseier FFA	Wathena KS.	Harney Silt Loam
Terry Buman FFA	Wathena KS.	Harney silt Loam
George Jorgensen	RT 2 Troy, KS 66087	Harney Silt Loam
Vernon L Hamilton	818 W Drwn, Salina, KS	HARNEY SILT LOAM
Orville W. Bidwell	905 Thurston Manhattan KS	Harney Silt Loam
Kenneth H. Sallee	PO Box 283 Troy, KS	Harney silt Loam
Kenneth Kern	51 Topeka, KS	St. Conservation Commission
Jayne Wiley	Lawrence, KS	Ks. Audubon Council
ORVILLE W. LOVE	1331 SW 31st Terrace TOPEKA, KS 66611	Harney state Soil
Brant Kebey	9749 NW Hwy 24	
Raymond Ruedker	Silver Lake, KS	
Roger D Coleman	Box 41 Ash Grove	Harney state Soil
JACKIE COLEMAN	"	"
Ken Baker	Topeka	Peterson & Assoc.
E. Lois Lynch	Salina, Kansas	Legislature
Jim Conant	Topeka	Ks. Dept. of Rev.
Neal Whitaker	Topeka	Kansas Beer Wholesalers Assn
Ray Foran	ELLSWORTH	
Arnie Foran	Ellsworth	
Patrick Newberg	Topeka	OTech



STATE OF KANSAS

GERALD "JERRY" KARR  
SENATOR, SEVENTEENTH DISTRICT  
CHASE, LYON, MARION, MORRIS,  
OSAGE COUNTIES  
R.R. 2, BOX 101  
EMPORIA, KANSAS 66801



TOPEKA

SENATE CHAMBER

COMMITTEE ASSIGNMENTS  
MEMBER: AGRICULTURE  
ASSESSMENT AND TAXATION  
ECONOMIC DEVELOPMENT  
EDUCATION  
FINANCIAL INSTITUTIONS  
AND INSURANCE  
JOINT COMMITTEE ON  
ECONOMIC DEVELOPMENT  
JOINT COMMITTEE ON STATE  
BUILDING CONSTRUCTION

DATE: February 8, 1990  
TESTIMONY: House Federal and State Affairs Committee  
FROM: Senator Gerald "Jerry" Karr  
SUBJECT: SB 96 (Harney Silt Loam State Soil)

I would like to briefly introduce SB 96 which passed the Senate with strong support during the 1989 Session. The bill has been debated for a number of years, both in the House and in the Senate Agriculture Committees.

I would ask that the Committee carefully consider the merits which will be explained by the out of town conferees. As you can tell by the sponsorship, we present a bipartisan effort in this area. I, along with Senator Oleen from Riley County, hope you will give this bill favorable consideration.

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 1  
February 8, 1990

STATE OF KANSAS

LANA OLEEN  
SENATOR, 22ND DISTRICT  
RILEY AND GEARY COUNTIES



TOPEKA

SENATE CHAMBER

COMMITTEE ASSIGNMENTS  
CHAIRMAN: GOVERNMENTAL ORGANIZATION  
VICE-CHAIRMAN: CONFIRMATIONS  
LABOR, INDUSTRY AND SMALL  
BUSINESS  
MEMBER: ASSESSMENT AND TAXATION  
ECONOMIC DEVELOPMENT  
JUDICIARY  
LEGISLATIVE EDUCATIONAL PLANNING  
COMMITTEE  
CHILDREN AND YOUTH ADVISORY COMMITTEE  
JOINT COMMITTEE ON ARTS AND  
CULTURAL RESOURCES

LEGISLATIVE HOTLINE  
1-800-432-3924

TESTIMONY IN SUPPORT OF SB 96  
HOUSE OF REPRESENTATIVES FEDERAL & STATE AFFAIRS

February 8, 1990

Chairman Barr, Vice Chairman Aylward & Members of the Committee .

I appear before you today in support of SB 96. On behalf of the Conferees present, we wish to thank you for the opportunity to speak to this bill.

Last session, the Senate voted 35-5 to elevate Harney Silt Loam as the official state soil. The reasons are numerous and will be addressed by other conferees who appear before you this afternoon.

There has been interest generated throughout Kansas during the past five years to designate a state soil. A number of agricultural and non-agricultural states have adopted state soils and use them as models for the study of conservation practices.

Harney Silt Loam is a productive soil found on 3.9 million acres in 25 Kansas counties. At present, it is under consideration as the official soil of our nation.

Extensive hearings were given to the bill last year in the Senate Agricultural Committee, so today we have concentrated our remarks to be presented by Dr. Orville Bidwell, Vernon Hamilton and Kenneth Kern, even though there were many others who wished to testify. I urge your favorable consideration of SB 96 for passage.

Senator Lana Oleen

HOUSE FEDERAL AND STATE AFFAIRS COMMITTEE

H E A R I N G

S.B. 96, An Act Designating Harney silt loam as the  
State Soil of Kansas.

08 February 1990, 1:30 p.m. Room 526S, State Capitol.

Presenters: Senator Lana Oleen  
Orville W. Bidwell, Professor Emeritus  
Vernon Hamilton, Soil Scientist, SCS, retired  
Kenneth Kern, Exec. Dir. State Cons. Comm.

Madam Chairman, Ladies and Gentlemen,

On behalf of the supporting coalition I thank the Committee for the  
opportunity to present the rationale for adoption of a State Soil.

Our brief presentation will be supplemented with supporting  
literature at the appropriate time.

FIRST OF ALL LET'S ESTABLISH THIS FACT ABOUT KANSAS SOILS.

Soils formed under prairie grassland have higher organic matter,  
higher nitrogen content, and stronger structure than soils formed  
under forest. Unfortunately, they also are more erodible by wind.

Grassland soils have higher and longer lasting fertility, and are  
less leached. For this reason they can be farmed much longer than  
forested soils without adding supplemental plant nutrients.

Completion of the State's soil inventory in October, 1987 revealed  
that Kansas has more acres of prairie soils than any other State.

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Vernon Hamilton, Salina, Kansas.

Orville W. Bidwell, Manhattan, Kansas.

Kenneth Kern, Topeka, Kansas.

Orville Bidwell: Concluding Remarks.

SENATE BILL Number 96:  
An Act Designating Harney silt loam as the  
STATE SOIL of KANSAS

My name is Vernon L. Hamilton, soil scientist, SCS, retired and I want to thank the House Federal and State Affairs Committee for allowing me to speak briefly on promoting the Harney Silt Loam to be designated as the STATE SOIL of KANSAS.

My career in the USDA SOIL CONSERVATION SERVICE, all 32½ years, was dedicated to make soil surveys in Kansas except for a fourteen week mapping detail in Minnesota after the soil mapping was completed in Kansas. Soil mapping is sampling and examining the soil in the field in the landscape to identify each of the soils. After the soils are identified, the information is recorded on an aerial photograph. This is done to properly delineate the kind of soil and to record the extent of it on the aerial photograph to make a soil map to show the location of each soil.

The Harney soil is a deep, well drained, fertile soil that formed in a silty loess on nearly level to moderately sloping uplands in the west central part of Kansas. I think this body of soil is probably the largest area of soil mapped in Kansas that has the same characteristics, such as, color, texture, structure, and chemical reactions. The Harney soil has a silt loam surface layer or A horizon; silty clay loam subsoil or B horizon; and a silt loam substratum or C horizon. The available water storage is high. These characteristics make it a good soil to study as a model and to promote as a State Soil.

There are several hundred soils named in Kansas and some of the soils correlated have names from surrounding states. In order to make a usable soil map we use soils from these states to make a complete map. These soil usually have names of areas or places in their state. Soils generally take the name from the location or place that they were first described. Soil types are correlated between states and that is why soils from other states are used in the Kansas Soil Survey reports.

The reason that the Harney Silt Loam was selected by the Kansas Association of Professional Soil Classifiers (KAPSC) is that the Harney soil is a large acreage. It occurs in 25 counties and has an extent or acreage of about 3,870,000 acres. The Harney Soil is a productive soil.

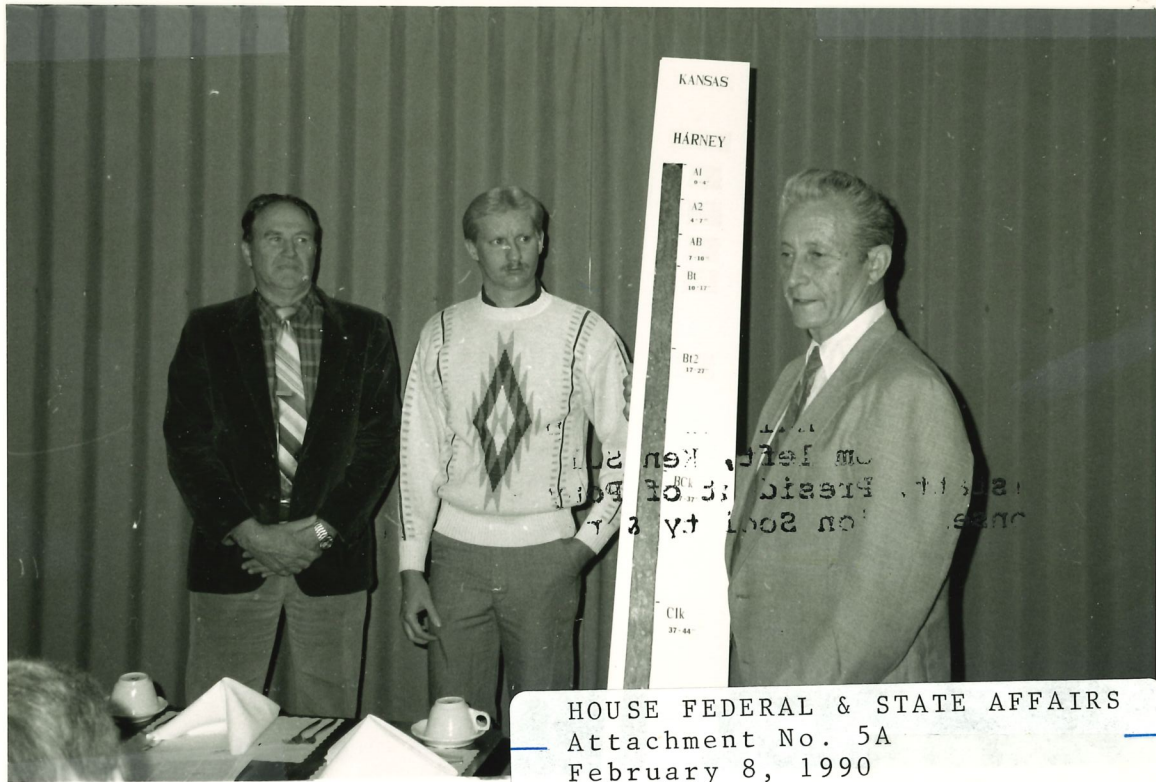
In my SCS career, I mapped soils in 22 Kansas Counties of which 5 of these counties have the Harney Soil. In this area of the Harney Soil, I mapped and authored the soil manuscripts for the Soil Surveys of Jewell, Mitchell, and Smith Counties. I, also, contributed to the field mapping in Lincoln and Phillips Counties. During my SCS career, I mapped over 4 million acres, wrote 9 soil survey manuscripts, and did field soil mapping 22 Kansas Counties. My wife, family, and I lived in Mankato, Smith Center, and Beloit from 1964 to 1981. I now reside in Salina.

The designation of the Harney Silt Loam as the State Soil would commemorate the great soil resource that Kansas has as a natural resource. The Harney silt loam soil was first described and mapped in Ford County, Kansas.

Thank you again for your time to let me talk to your committee about one of the greatest resources of Kansas.

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 4  
February 8, 1990





HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 5A  
February 8, 1990

**SOIL — KANSAS'S MOST VALUABLE RESOURCE**

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 5B  
February 8, 1990



# SOIL — KANSAS'S MOST VALUABLE RESOURCE

## AN INCOMPARABLE LEGACY

Agriculture is Kansas's most important industry. It annually contributes nearly six billion dollars, divided about equally between crops and livestock, to the State's economy.

Responsible for this phenomenal production is a remarkable combination of climate, landscape, and soil that has caused 48% of the State's 52 million acres, or 25 million acres, to be classified as prime farm land, and twenty-nine million acres to be suitable for cultivated crops.

No State has more acres of prairie soils, and only Texas has more prime farmland. Abroad, the steppes of the Soviet Union, and the pampas of Argentina and Uruguay are the only comparable soils.

Kansas's buildings, highways, cities and countless other improvements are graphic illustrations of the long-enduring past productivity of these unique soils. Farm crops and the livestock they nourished financed a sizable portion of these impressive improvements.

## PRAIRIE SOILS — A TREASURE TROVE

Once prairie grassland covered most of Kansas. Then, the land surface consisted of a mixture of weathered rock, enriched with plants and animals, living and dead. This combination of mineral and organic matter supported all prairie life, and came to be known as the fabulous North American prairie soils.

For eons prairie plants used photosynthesis to convert solar energy, carbon dioxide, and water to carbohydrates, proteins, and fats that nourished native herbivores. Animal waste and uneaten plants and plant roots contributed compounds of carbon, hydrogen and oxygen to the soil. Over time this carbon-rich mixture of

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*On the cover: Grain sorghum and newly sown wheat on nearly level Harney silt loam.<sup>1</sup>*

<sup>1</sup> From *Soils of the Great Plains*, by A. R. Aandahl, by permission of University of Nebraska Press. Copyright © 1982 by the University of Nebraska Press.

lignins, tanins, fats, and waxes, known as humus, accumulated to as much as 8 or 10 percent and darkened the soil's top foot.

Accumulating with the organic-rich plant and animal residue also were plant-nutrient elements, notably nitrogen, phosphorus, potassium, and calcium, that were to sustain for decades the cultivated cereal crops that caused many European nations to change from grain to dairy farming.

The high organic-matter content of the soils of the tall-, mid-, and short-grass prairie, made them especially suitable for growing the cultivated grasses, corn and wheat, and much more enduring than the low organic-matter soils formed under forest in eastern United States.

## SOME TREATED THEIR SOILS LIKE DIRT

The vast sea of grassland gave way to the plow as the pioneers sought to produce cereals for themselves and their livestock. Many chose nearly level, deep, productive soils that tilled easily. Some chose more sloping lands near streams or that were shallow to building stone, and had erosive soils.

Cultivated crops were not so protective of the soil as the native grasses had been. Tilling to prepare a seedbed and later to control weeds in row crops exposed bare soil to the devastating impact of the raindrop. The longer the land was farmed, the more the bare soil was exposed to the beating rains, the more intense the rains, and the less protection afforded by windbreaks or natural barriers, the more apt the soil to suffer grievous damages, first by sheet- and later, often by gully-erosion.

By drastically reducing the porosity and permeability of the surface, erosion reduced the moisture that entered the soil and became available for plants. Compared to the original spongy prairie soil, the eroded cultivated soil was much less hospitable to plants. Frequent puddling by raindrops dispersed the soil, producing a hard crust when dry, that resisted germinating seedlings.

Many plant nutrients rode piggy-back on detached particles to adjacent streams and their bottom lands. Replacing nitrogen losses with commercial nitrogen fertilizer became a common inexpensive practice until the 1970s when fertilizer prices increased dramatically.

. addition to soil-fertility depletion, erosion sediment clogged streams, lakes, and harbors, and gullies destroyed roads and bridges, reducing wildlife populations, and imposing additional recreation and transportation costs.

Erosion losses that exceeded tolerable limits, such as corn lands on sloping loessial soils that lost three bushels of soil to produce one bushel of corn, generally made corn cultivation uneconomical after a few years.

**USES OTHER THAN AGRICULTURAL**

Soils have other important uses in addition to producing food, fiber, feed, and drug crops. They have value as open space, and for recreation; as an engineering medium for use in construction and support of highways and buildings; as Nature's only acceptable waste-disposal medium, and as a watershed or catchment for surface water and for storing underground water. Kansas soils admirably fulfill most of these criteria.

**COMMEMORATION**

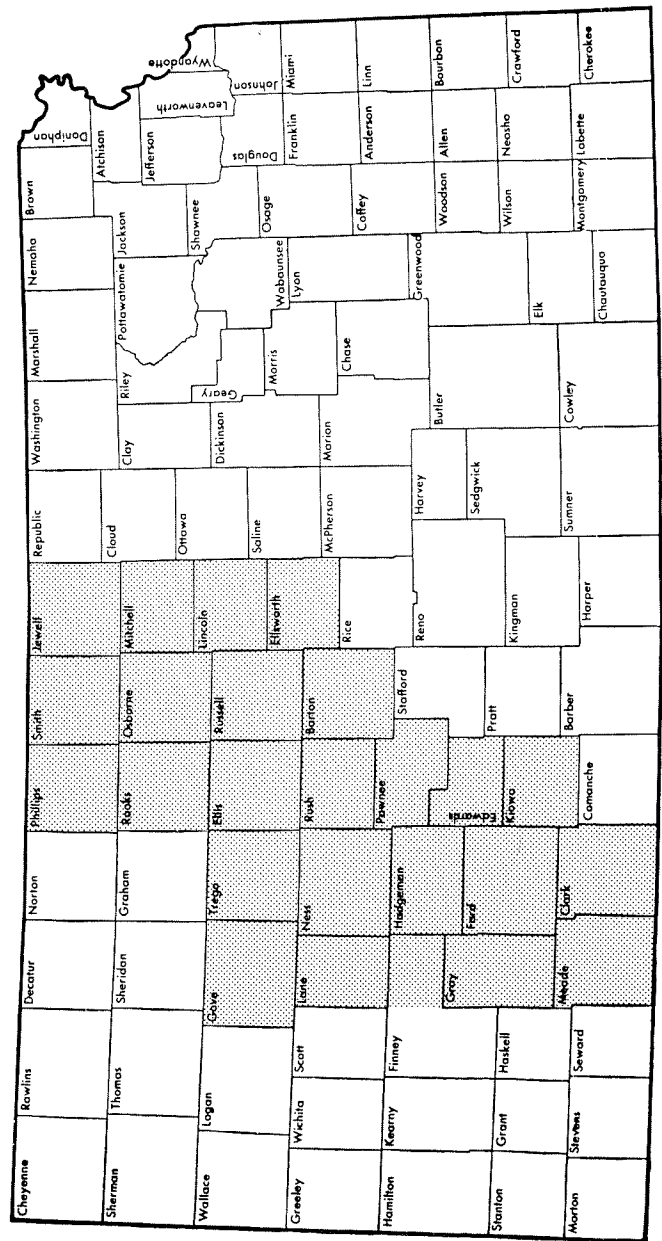
To commemorate the State's unique soil legacy, and to observe the completion of the State's soil inventory by the Soil Conservation Service in 1987, the Kansas Association of Professional Soil Classifiers (KAPSC) proposes that the State of Kansas, in the 127th anniversary year of its entry into the Union, adopt a typical prairie soil as the official State soil to acknowledge the heritage that has made agriculture the State's number one industry, making it possible to place first in the nation in the production of wheat, grain sorghum, and forage sorghum.

**THE MOST SUITABLE STATE SOIL**

The Kansas Association of Professional Soil Classifiers recommends Harney silt loam as the State's soil because its three-dimensional profile contains all of the desirable properties of an ideal prairie soil and because its 3,870,000 acres in 25 west-central counties (Figure 1) make it the most extensive soil of the State.

Having approximately 1.3 million acres on 0 to 1% slopes (cover) and 1.9 million acres on 1 to 3% slopes, makes the Harney soil ideally suited to minimum-tillage practices designed to reduce wind and water erosion.

Fig. 1. Counties that have Harney silt loam.



## Harney Silt Loam

Harney silt loam formed under prairie vegetation in windblown silts called "loess." It occupies nearly 4 million acres, two to five counties wide, extending from Nebraska to Oklahoma, and from an area of 18-inch annual precipitation on the west to one of 28 inches on the east.



*Fig. 2. Harney silt loam profile, 0 to 65 inches deep. Ten-inch surface layer of friable dark grayish-brown silt loam over 14 inches of grayish-brown silty clay over 20 inches of yellowish-brown silty clay loam. (F scale is in feet).<sup>1</sup>*

<sup>1</sup> From *Soils of the Great Plains*, by A. R. Aandahl, by permission of University of Nebraska Press. Copyright © 1982 by the University of Nebraska Press.

The Harney silt loam contains an 8- to 10-inch surface layer of friable dark grayish-brown silt loam overlying grayish-brown silty clay loam or silty clay. In depth, the soil always exceeds 48 inches, and usually 60 inches. The Harney cross-sectional profile is shown as Figure 2.

As Kansas soils vary, the remaining 48 million acres of soil may be expected to differ from the Harney silt loam. Most of the silty soils east of the Harney zone have darker colored, more clayey surfaces, whereas the soils west of the Harney soils tend to be lighter in color and have less clayey subsoils.

Since Kansas soils comprise a complex and variable mosaic, it is unlikely that one individual can learn them all. However, one can learn the properties of a model soil, in this case, the Harney, the proposed State soil, and compare other soils to it.

## FOR FURTHER READING

Persons interested in learning more about soils are advised to refer to their county soil-survey report, available at the Soil Conservation Service and Agricultural Extension Service offices.



# WHY DOES KANSAS NEED A STATE SOIL?

**I. To provide as a teaching tool an example of a typical Kansas prairie soil for which there is abundant physical and chemical data, and to which other soils of local or specific interest may be compared.**

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Students no more can learn all of the Kansas soils than they can all of its kinds of plants. To assure they use an acceptable model, the Harney silt loam is proposed.

**II. To recognize the unique symbiotic relationships among prairie plants, animals including Man, and geologic mineral matter that has interacted according to Nature's laws to produce the prairie soil, the thickest of the extraordinarily thin films existing between the atmosphere and the lithosphere upon which all terrestrial life depends.**

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Except for the discovery of America, never in the history of Mankind has there been a greater revelation than the discovery of the North American prairie, the largest of three such natural areas in the world. Except for inextensive areas in the southeast and on the floodplains of eastern Kansas, most of Kansas's 52 million acres once was in prairie.

**III. To acknowledge dependence of the State's economy on unusually productive soils.**

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Interaction of favorable soils and climate are responsible for Kansas's ranking first in the production of wheat ~~and~~ forage sorghum, and ~~second in the production of~~ grain sorghum, among the 50 states.

Previous remarkable soil properties once present in virgin prairie soils now also are expressed in other ways, in buildings, highways, cities and towns, and in countless other improvements that were financed, at least in part, by farm crops and livestock they nourished.

**IV. To recognize and commemorate the properties of the Harney silt loam, a typical highly productive prairie soil.**

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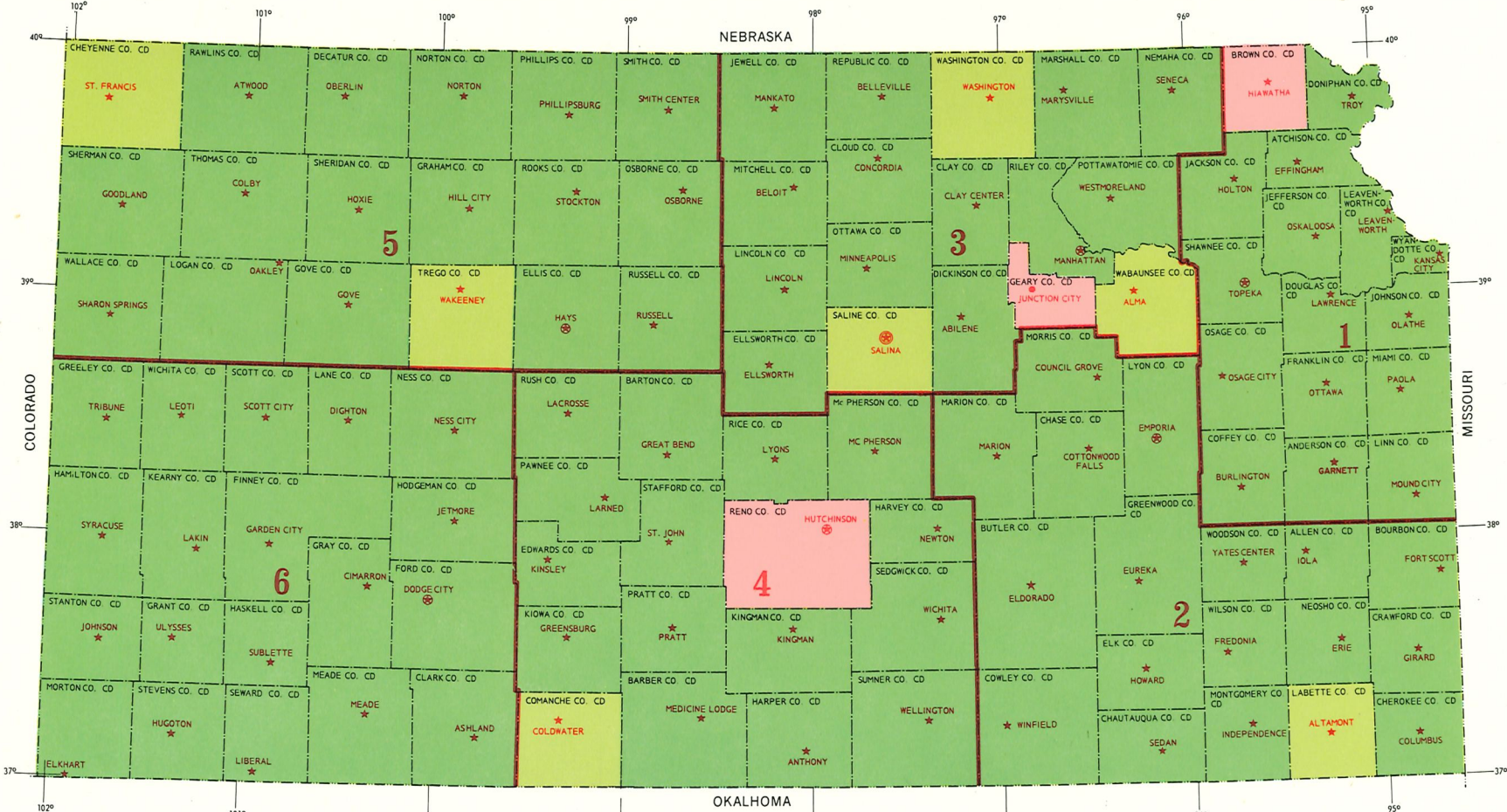
The Harney's nearly level slopes and thick, dark-colored silt loam surface provide an ideal medium in which to grow crops with a minimum of erosion and other deterioration. Occupying the most acreage of any Kansas soil, it exists on 3,870,000 acres in 25 counties, stretching from Nebraska to Oklahoma in west central Kansas. More than 1.3 million acres occur on 0 to 1% slopes; nearly 2 million acres, on 1 to 3% slopes.

**V. To commemorate completion in 1987 of the State's soil inventory.**

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Consisting of aerial photographic maps and interpretive text, county soil survey reports may be used to identify soils, ascertain land quality, and numerous suitabilities, including that for specific crops, farm ponds, conservation and/or reduced tillage systems, highways, buildings, solid-waste disposal, wildlife, and countless other uses.

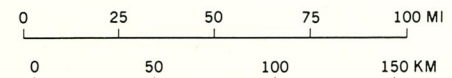
Armed with basic knowledge of the soil, agronomists now can devise "what if" computer programs to determine effects of various management practices on crop yields and on soil degradation.



LEGEND

- STATE OFFICE, SALINA
- AREA HEADQUARTERS
- FIELD OFFICE (HDQRS. OF DC)
- AREA NUMBER AND BOUNDARY
- MODERN PUBLISHED SOIL SURVEY
- MAPPING COMPLETE, PUBLICATION PLANNED
- MAPPING UPDATE IN PROGRESS COMPLETION DATE SET

# STATUS OF SOIL SURVEYS KANSAS OCTOBER 1988



HOUSE FEDERAL & STATE AFFAIRS

Attachment No. 5D  
February 8, 1990

SOURCE: SCS Drawings 5,S-32,550,  
5,R-31,052, and information from SCS  
Field Personnel. Albers Equal Area  
Projection.



OFFICIAL STATE SOILS IN ORDER OF ADOPTION

STATE	YEAR	SOIL
NEBRASKA	1979	Holdrege Silt Loam
WISCONSIN	1983	Antigo Silt Loam
VERMONT	1985	Tunbridge Silt Loam
OKLAHOMA	1987	Port Silt Loam
FLORIDA	1988	Myakka Fine Sand

<sup>change 4/26  
TFL/ML</sup>  
**For official soil,  
will sand do?**

TALLAHASSEE, Fla. (AP)—With a few jokes and jabs about the definition of dirt, the state House voted overwhelmingly Monday to declare Myakka Fine Sand as the official state soil of Florida.

The bill, sponsored by Rep. George Crady, was sent to the Senate on a 106-5 vote.

The House rejected a proposed amendment that would have declared Crady as "the official Florida State Sandman."

In previous discussions, Rep. Mike Friedman failed in an attempt to have asphalt declared the official soil in metropolitan southeast Florida.

Myakka Fine Sand, which is found on 800,000 acres in Florida, is defined as a deep, sandy soil characterized by a black or reddish brown layer about 2 feet from the surface. The soil is commonly found in coastal and southern areas of Florida and is used to grow crops such as tomatoes and watermelons.

Another bill would designate key lime pie as the official state pie.



## HISTORY OF THE STATE-SOIL DRIVE

Orville W. Bidwell

- 1985 Kansas Association of Professional Soil Classifiers propose Harney silt loam as the State's official soil.
- 1986 House of Representatives Agriculture Committee heard H.B. 3033, a Bill requesting adoption of Harney silt loam as the State's official soil but took no action in deference to a State reptile Bill requested by school children of Caldwell, Kansas.
- 1987 Legislator friends of the State soil requested that the Soil Bill not be introduced in order to have more time to debate Bills pertaining to the pari-mutual betting, liquor by the drink, and State lottery issues.
- 1988 The Senate Agriculture Committee heard S.B. 569, proposing a State soil but took no positive action.
- 1989 Nine proponents appeared before the Senate Agriculture Committee in behalf of S.B. 96 on 9 February 1989. Passed by the Agriculture Committee, the full Senate approved the Bill 35 to 5 on 2 March 1989.

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State Soil Final Report<sup>1/</sup>

February 09, 1989      Nine proponents spoke at a Senate Agriculture Committee Hearing. There were no opponents.

February 24, 1989      Senate Agriculture Committee approved Bill 96.

March 02, 1989        The Senate approved Bill 96, 35 to 5 and forwarded to the House Federal and State Affairs Committee.

March 09, 1989        Chairperson Ginger Barr, House Federal and State Affairs Committee, stated that there was no time for a Hearing in the 1989 Session.

March 21, 1989        Governor Hayden stated, "I will gladly sign the Bill".

March 23, 1989        Professor Francis Hole of the University of Wisconsin stated, "I am working on a proposal to name a U.S. national soil. I am proposing the Harney silt Loam of Kansas because the Harney is an excellent representative of the fertile soils of the Plains."

May 02, 1989          The soil Bill remained in the House Federal and State Affairs Committee at the conclusion of the 1989 Legislative Session. The Committee may consider the Bill in the 1990 Session.

September, 1989      F.D. Hole's proposal of Harney as the national soil appeared in the Fall issue of SOIL SURVEY HORIZONS, entitled "Proposal for a National Soil of the United States." (30:77-79.)

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<sup>1/</sup> Report to the Kansas Association of Professional Soil Classifiers, Lawrence, Kansas, 27 January 1990.  
Orville W. Bidwell, Chairman, State-Soil Committee.

SOIL SURVEY HORIZONS  
30: 77-79. Fall 1989.

## Proposal for a National Soil of the United States

F. D. Hole and O. W. Bidwell<sup>1</sup>

Picture a bald eagle (*Haliaeetus leucocphalus*), our national bird, soaring over the Great Plains in the year 1492 when Columbus reached North America. Imagine a herd of four million buffalo (*Bison bison*), below the magnificent bird, slowly moving north with the spring, as they graze buffalograss (*Buchloe dactyloides*) and other native prairie grasses mixed with flowering plants. This native, lush pasture grew in rich black soils of the Plains (Fig. 1).

One of the productive soils of the Great Plains in this century, 500 yr later, classified as is the Harney silt loam (fine montmorillonitic, mesic Typic Argiustoll), famous in Oklahoma, Kansas, and Nebraska for its high yields of wheat (*Triticum aestivum* L.) and sorghum [*Sorghum bicolor* (L.) Moench] (Fig. 2).

<sup>1</sup>Soil scientists (retired), Wisconsin Geological and Natural History Survey, Univ. of Wisconsin, Madison, WI 53706, and **KSU**, Manhattan, KS 66506, respectively.

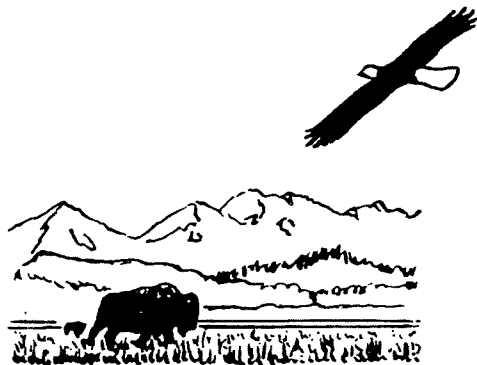


Fig. 1. America the Beautiful with good earth beneath.

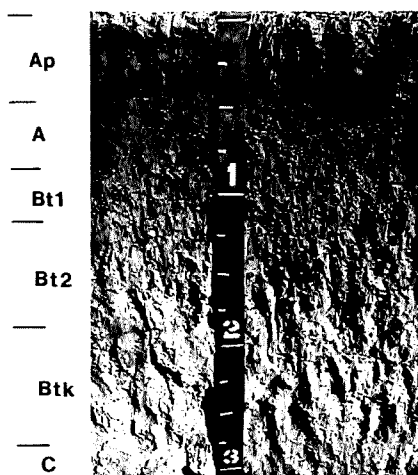


Fig. 2. Harney silt loam profile. Trego County, Kansas (E. ½, sec. 16, T. 12S., R. 23W.). Scale in feet. Photograph by Cecil D. Palmer, soil scientist, USDA-SCS, 10-15-85.

The buffalo is a symbol of "America the Beautiful," as shown on a U.S. postage stamp. This great animal was and is supported by fertile soils, of which the Harney silt loam is an excellent example. This soil occupies millions of acres and is known for its productivity (Fig. 3). The name itself is adapted from *harahey*<sup>2</sup>, an ancient term for the Pawnee Indians in the language of the Wichita Indians. Before the pioneers came, the friendly tribal confederacy, the Pawnees, lived on prairie soils, raising corn (*Zea mays* L.), pumpkins (*Cucurbita maxima* Duch.) and bean (*Phaseolus vulgaris* L.), and eating buffalo jerkey. These native peoples built in earth houses and excelled in weaving blankets and making pottery and baskets.

We propose that the Harney silt loam be recognized as the national soil of the USA, to represent the vast soil resource that supports land plants, animals, and humans throughout the nation. The Harney silt loam is pictured

<sup>2</sup>Information from Kansas-based archaeologist, Patricia O'Brien.

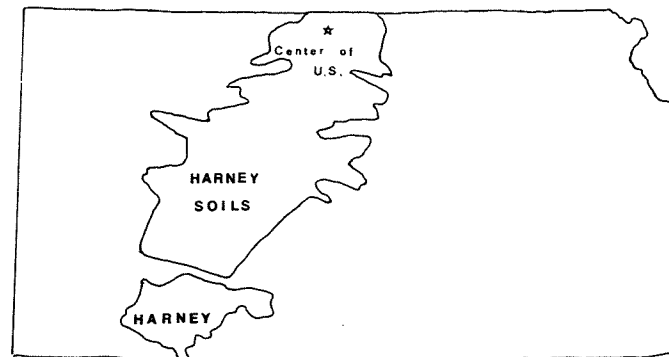


Fig. 3. General distribution of Harney soils that occupy nearly 4 million acres in Kansas. Average annual precipitation ranges from 18 in. on the west to 28 in. on the east.

in color and carefully described in a beautiful book by Dr. A.R. Aandahl, entitled *Soils of the Great Plains*, (Univ. of Nebraska Press, 1982).

The 1985 and 1990 farm bills were conceived to protect our soils and waters from destructive effects of soil erosion. Recently, legislatures in Florida, Iowa, Nebraska, Oklahoma, Vermont, and Wisconsin have designated selected soils as official soils of those states. Recognition of a national soil will further proclaim the fact that America the Beautiful is based on fertile soil.

Today, fewer bald eagles soar over fewer buffalo than in 1492, and the grassland soils have suffered degradation since then. The American people have a will to preserve the great soil resource on which land life depends. The Harney silt loam is a fitting representative of that resource.

## Harney Silt Loam

Sheila Hochhauser, David Margolies, and Ann Bidwell<sup>1</sup>

Oh give me a home on the Harney silt loam,  
And I'll plant it in acres of wheat;  
This soil is the tops,  
For producing our crops;  
So our Nation has plenty to eat.

Loam, loam on the Plains,  
And Harney silt is its name;  
This soil holds the key  
To our economy;  
And gives Kansas its reason for fame.

(Tune: Home on the Range)

**Editor's footnote:** Ms. Hochhauser and Mr. Margolies sang Harney silt loam on National Public Radio, Mar. 11, 1989.

<sup>1</sup>State representative, 67th District, Manhattan, KS 66502; assistant professor of entomology, Dep. of Entomology, Kansas State Univ., Manhattan, KS 66506; and ophthalmologist, 2233 Corona Rd., Waukegan, IL 60087. (Last three lines).

Coalition of Supporting Agencies

- 1 Kansas Assoc. of Prof. Soil Classifiers
- 2 Kansas Council, Soil And Water Conservation Society of Amer.
- 3 Kansas Association of Conservation Districts
- 4 The Land Institute

Organizations Sympathetic to the Concept

- 1 Kansas Audubon Council
- 2 Kansas Agric. Exp. Station
- 3 Soil Conservation Service
- 4 Cooperative Extension Service, John Hickman

Proposed Organizations to Implement State Soil in Education

- 1 Ag in the Classroom
- 2 Vocational Agriculture
- 3 Teachers of Science
- 4 Teachers of Biology
- 5 Audubon Chapters
- 6 League of Women Voters
- 7 Sierra Club
- 8 Kansas Natural Resource Council
- 9 Kansas Advisory Council for Environmental Education
- 10 Kansas History Task Force of the Kansas State Board of Education.

- - -

January 31, 1990

James D. Braden, Speaker of the House  
Capitol--House of Representatives  
Topeka, Kansas 66612

Dear Speaker Braden:

"SOIL IS MORE THAN JUST DIRT." That short statement says so much. Agriculture is the most important industry in our state. As Kansans, we definitely know that soil IS more than just dirt.

According to the soil inventory taken in Kansas in 1987, our state has more acres of prairie soils than any other state. Since our soil is so vital to our economy, such a valuable resource, it seems fitting for the Kansas Legislature to designate an official state soil. We are so proud of the various state symbols that represent our state, and we feel that our state soil would be a welcome addition to the list.

Harney silt loam, which is found in 25 counties of Kansas and covers almost four million acres of land in our state, is considered to be the most representative of the Kansas prairie soils. Harney silt loam is our choice for state soil.

Our soil is eroding. Recent statistics indicate that almost six and one-half million tons of soil in the United States is being lost because of erosion. By making Harney silt loam our official state soil more attention would be given to our greatest resource--our soil. Hopefully, we would become more concerned with conserving and preserving this valuable asset.

Thank you for your consideration.

*U. S. D. #429  
Troy Grade School*

WE, the undersigned students and staff at Troy Grade School, U.S.D. #429, in Doniphan County, would like to have the Kansas Legislature designate Harney silt loam as our official state soil.



# State Conservation Commission

109 S W 9TH STREET, ROOM 300

TELEPHONE (913) 296-3600

TOPEKA, KANSAS 66612-1299

**HOUSE FEDERAL AND STATE  
AFFAIRS COMMITTEE  
SENATE BILL 96  
February 8, 1990**

**TESTIMONY BY:  
KENNETH F. KERN  
EXECUTIVE DIRECTOR**

The State Conservation Commission has taken official action to support the designation of the Harney Silt Loam soil as the state soil of Kansas.

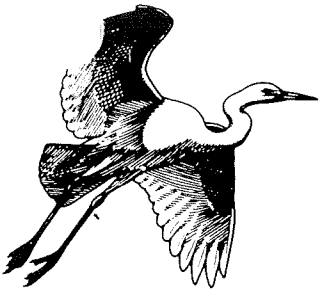
Six (6) states have preceded Kansas in naming a state soil. They are Nebraska, Wisconsin, Vermont, Oklahoma, Florida and Iowa.

The Agriculture Hall of Fame, located in our state at Bonner Springs, houses a display of these designated "State Soils". We feel it would be appropriate for the Harney Silt Loam to be included in this display as our state soil.

An effort is underway to include a chapter on soil conservation in our school's History of Kansas curriculum. The designation of a state soil would be beneficial in increasing our children's awareness of the importance of our state's natural resources.

Thank you for the opportunity to explain the State Conservation Commission viewpoints on Senate Bill 96. We urge your favorable consideration of the bill.

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 6  
February 8, 1990



# Kansas Audubon Council

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ON JANUARY 13, 1990, THE KANSAS AUDUBON COUNCIL VOTED  
TO SUPPORT THE CONCEPT OF ESTABLISHING A STATE SOIL.

At first glance, this may seem unimportant, or even trivial, given the tax and budget issues facing the legislature this year. We agree.

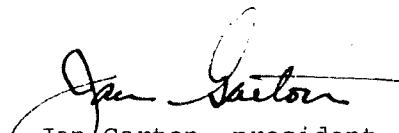
But on further examination, the concept gains in value. Our Kansas economy depends in large measure on the health of the agricultural sector, which in turn depends more and more on the health of the soil. Soil is the foundation of a strong agricultural system.

The Kansas legislature recognized the importance of teaching young Kansans about agriculture through the Kansas Foundation for Agriculture in the Classroom. The Kansas Audubon Council also sees the creation of a State Soil as an educational tool.

Kansans, young and old, need more information and understanding about regional soil differences and the impacts those differences have had in the development of our state, as well as what those differences might mean in the future. Soils are one means of identifying wetland areas, a threatened type of habitat in Kansas and around the world. Soil types will help determine where future landfills may be constructed, where groundwater is protected from or where vulnerable to human impacts, and where choices between protecting good farmland or allowing urban development will be made.

Before the Kansas Audubon Council is willing to put its energy toward the adoption of a State Soil, we want to see a plan in place to make wide use of the new designation. It would be a waste of legislative time to adopt a State Soil, only to see it gather dust as a trivia item.

The Kansas Audubon Council is willing to cooperate with proponents of a State Soil to develop a far-reaching educational program. If that is done, we hope to champion the concept vigorously, and urge the legislature to be receptive.

  
Jan Garton, president  
Kansas Audubon Council

  
Joyce Wolf, legislative liaison  
Kansas Audubon Council.

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 7  
February 8, 1990





STATE OF KANSAS

MIKE HAYDEN, *Governor*

DEPARTMENT OF SOCIAL AND REHABILITATION SERVICES

Docking State Office Building, Topeka, Kansas 66612-1570

☎ (913) 296-3271

January 31, 1990

WINSTON BARTON  
*Secretary*

THELMA HUNTER GORDON  
*Special Assistant*

TIM OWENS  
*General Counsel*

ANN ROLLINS  
*Public Information  
Director*

Administrative  
Services

J. S. DUNCAN  
*Commissioner*

Adult Services  
JAN ALLEN  
*Commissioner*

Alcohol and Drug  
Abuse Services  
ANDREW O'DONOVAN  
*Commissioner*

Income Maintenance/  
Medical Services  
JOHN ALQUEST  
*Commissioner*

Mental Health/  
Retardation Services  
AL NEMEC  
*Commissioner*

Rehabilitation  
Services  
GABE FAIMON  
*Commissioner*

Youth Services  
ROBERT BARNUM  
*Commissioner*

The Honorable Ginger Barr  
House of Representatives  
State House  
Office No. 115-S  
Topeka, Kansas 66612

Dear Representative Barr:

As per your recent request of Barbara Stodgell we are sending information concerning children waiting for an adoptive family. This data is current as of December 31, 1989.

If you need additional information please contact Barbara Stodgell, Adoption Specialist, 296-4661.

Sincerely,

Janice S. Waide, Director  
Division of Children in Need of Care

JKW:BKS:tab

HOUSE FEDERAL & STATE AFFAIRS  
Attachment No. 8  
February 8, 1990

## Statistics Of Waiting Children

Total number of children waiting, where no family has been selected or identified: 45

Race: White - 26  
Black - 17  
Black/White - 1  
Black/Hispanic - 1

Sex: Male - 27  
Female - 18

Age: (0-5 years) - 5  
(6-10 years) - 17  
(11-14 years) - 17  
(15-18 years) - 6

Placement with siblings  
is the plan: 19

Handicap: Emotional - 28  
Mental Retardation and Emotional - 7  
Learning Disability and Emotional - 2  
Physical - 3  
Physical and Emotional - 2  
Physical and Mental Retardation - 1  
Physical, Mental Retardation, and Emotional - 1

### Specifics by Age:

#### (0-5 years) - 5 total waiting children

Race: White - 0  
Black - 5 (2 Males and 3 Females)  
Black/White - 0  
Black/Hispanic - 0

Sex: Male - 2 (2 Black)  
Female - 3 (3 Black)

Handicap: Emotional - 2 (2 Black Females)  
Physical - 3 (2 Black Males and 1 Black Female)

#### (6-10 years) - 17 total waiting children

Race: White - 9 (3 Males and 6 Females)  
Black - 7 (4 Males and 3 Females)  
Black/White - 0  
Black/Hispanic - 1 (1 Male)

Sex: Male - 8 (3 White, 4 Black, and 1 Black/Hispanic)  
Female - 9 (6 White and 3 Black)

Handicap: Emotional - 13 (1 White Male, 5 White Females, 4 Black Males,  
2 Black Females, and 1 Black/Hispanic Male)  
Mental Retardation and Emotional - 2 (1 White Male and 1 White Female)  
Physical and Emotional - 1 (1 Black Female)  
Physical and Mental Retardation - 1 (1 White Male)

HSA  
8-2  
2-8-90

(11-14 years) - 17 total waiting children

Race: White - 12 (9 Males and 3 Females)  
Black - 5 (4 Males and 1 Female)  
Black/White - 0  
Black/Hispanic - 0

Sex: Male - 12 (8 White and 4 Black)  
Female - 5 (4 White and 1 Black)

Handicap: Emotional - 11 (4 White Males, 3 White Females, and 4 Black Males)  
Mental Retardation and Emotional - 3 (1 White Male, 1 White Female,  
and 1 Black Female)  
Learning Disability and Emotional - 1 (1 White Male)  
Physical and Emotional - 1 (1 White Male)  
Physical, Mental Retardation, and Emotional - 1 (1 White Male)

(15-18 years) - 6 total waiting children

Race: White - 5 (4 Males and 1 Female)  
Black - 0  
Black/White - 1 (1 Male)  
Black/Hispanic - 0

Sex: Male - 5 (4 White and 1 Black/White)  
Female - 1 (1 White)

Handicap: Emotional - 2 (1 White Male and 1 Black/White Male)  
Mental Retardation - 1 (1 White Male)  
Mental Retardation and Emotional - 2 (1 White Male and 1 White Female)  
Learning Disability and Emotional - 1 (1 White Male)

HSA  
8-3  
2-8-90