

# KANSAS GEOLOGY AS VIEWED BY THE ARTIST

by

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**And what anatomy is to the figure painter,  
such is geology to a landscape artist —  
Miss Lizzie J. Williams, 1872**

*Castle Rock, Gove Co. KS*

*Jan 1872*

I try to convey the ever-changing moods of the landscape and to show the effect of rain and wind on the surface of the Earth. I like to paint lonely places because only when one is alone can he feel the immensity of space and realize his own insignificance. Raymond Eastwood, 1968

# Kansas Geology as Viewed by the Artist

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## Abstract

The geology of Kansas is simple in general but complex and detailed in specifics. Artists can capture the essence of the form in their art on many scales from landscapes to individual fossils and can and do reconstruct ancient environments. The physiography of Kansas reflects the bedrock geology so that the High Plains in the west are Tertiary flat-lying largely unconsolidated clastic rocks, whereas the Flint Hills are composed of alternating layers of flint (chert)-bearing limestone and shale forming prominent hills and valleys. The rolling hills of northeastern Kansas are the remnants of the glaciers that once covered that part of the state. The present landforms were and are produced by erosion of the sedimentary sequence by either running water or the abrasive work of the wind.

Everyone views a subject a bit differently and that is what makes the world interesting. An artist or a artistic geologist views their subject in different ways too. Some capture an image in the field and others take photographs or make preliminary drawings and then finalize them in the studio. Either way, the recorder tries to make the reproduction as authentic as possible and preserve the ambience as if viewed on the spot. Some of the preeminent Kansas artists of the 20th Century include Birger Sandzén, John Steuart Curry, Raymond Eastwood, Robert Sudlow, Louis Copt, James Hamil, and Margaret Whittimore.

## Introduction

And what anatomy is to the figure painter, such is geology to the landscape artist

Miss Lizzie J. Williams, 1872

There are geologists who do art work and there are artists who capture geology in a variety of forms. The artist represents what he/she feels or wants to represent, which is in contrast to a photograph or visual representation of the subject viewed by the geologist. This, then, is about artists who see and represent geology in different media.

The geology of Kansas is simple in general but complex in specifics. Artists capture the essence of the form in their art on many scales from landscapes to individual fossils renditions to reconstructed ancient environments. Because the geology of Kansas is comprised of sediments, the art form is of sedimentary rocks and their sequence. The landforms are produced by erosion of the sedimentary sequence by either running water or the abrasive work of the air.

Kansas geology has been recorded by artists in pencil drawings, pen and ink sketches, watercolors, and paints. Artist may prefer to render their subject at the place in the out-of-doors, whereas others work in the studio from photographs or rough field sketches. Each artist usually has a favorite geological subject such as a natural disaster, a landscape, or an area in the state and nominally close to their home. Natural disasters such as tornados, dust storms, and floods have been recorded. The chalk bluffs in the western part of the state are a favorite subject as are the landscapes in the Smoky Hills, Red Hills, Flint Hills, and Osage Cuesta countries. Rivers and springs also provide a natural interesting subject.

Some of the artists were or are geologists or had training in the subject and others were just interested in natural history and the beauty of the outdoors. Paleontologists, Raymond C. Moore and Samuel W. Williston, illustrated their papers and books with excellent representations of fossils and recreated ancient landscapes. Although Kansas may be dull and uninteresting to some, to others, especially the artist, it is an interesting, beautiful, and exciting subject.

## The Geology

The present physiography was and is developed by wind and water, both powerful forces that change the landscape form. Louis Copt's representation of the *Kansas River* and John Steuart Curry's *Sanctuary* of the 1927 Kaw River flood are examples of running water. The 'one-hundred year floods' of the Kaw have occurred in 1844, 1903, 1927, 1951, and 1993. The runoff of water from the frequent and violent rainstorms is the cause of the floods and Curry captures the turbulence in his *Line Storm*. Burning of the vegetation in the spring, especially in the Flint Hills, as represented by Copt's *Burn Near Cassoday*, is to destroy weeds and unwanted plants. The denuded land, however, gives rise to faster runoff on the barren



Kansas River, by Louis Copt (2005) (oil)



Sanctuary (1927 Kaw River Flood), by J. Steuart Curry (1935) (oil)



Line Storm, by J. Steuart Curry (1935) (oil)



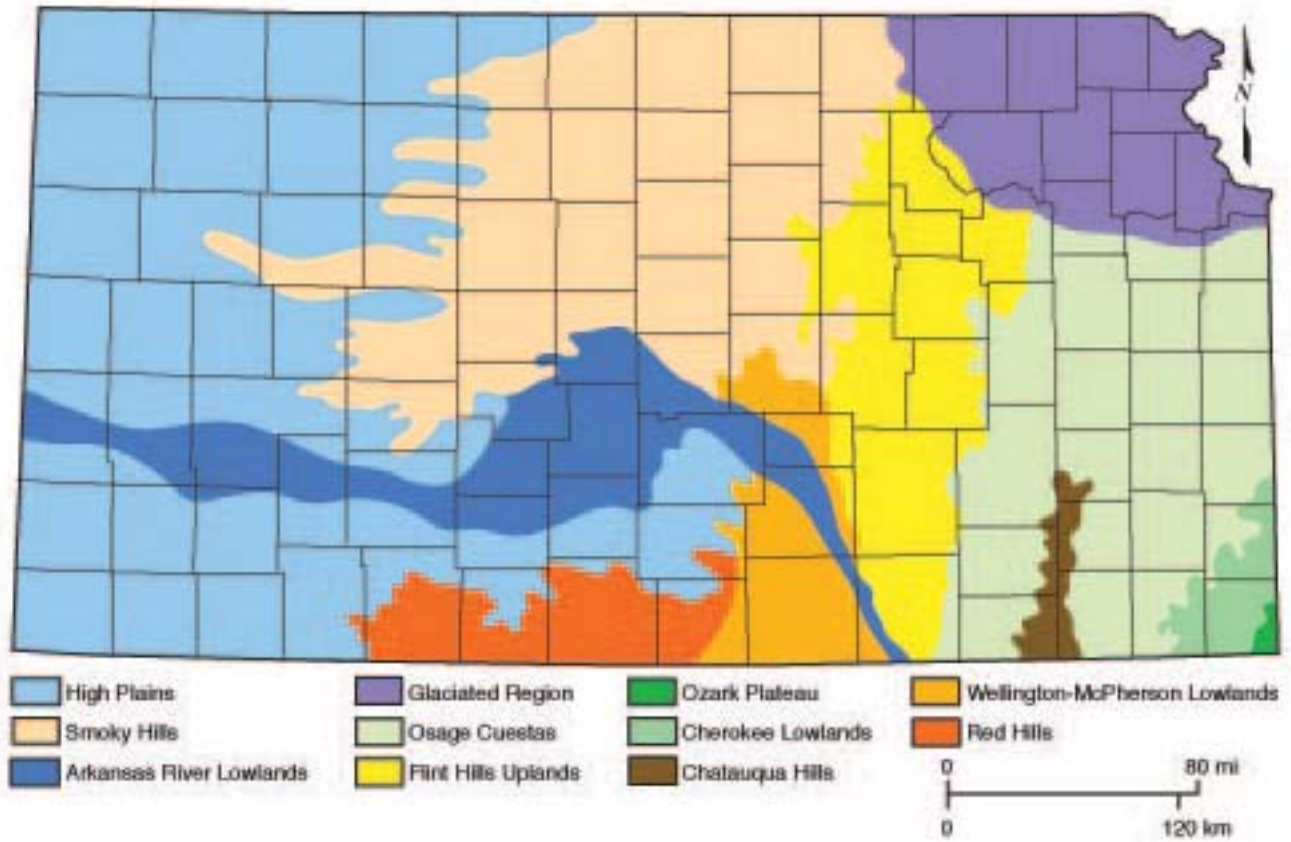
Burn Near Cassoday, by Louis Copt (2002) (oil)





slopes that have no protection and it accelerates erosion. Curry's famous *Tornado Over Kansas*, shows the destructive power of the wind and the possible result of wind action as in Alexander Hogue's 1930s *Dust Bowl* scene.

The physiography of the state reflects the bedrock geology so that, for example, the High Plains in the west are formed by Tertiary flat-lying largely unconsolidated clastic rocks, whereas the Flint Hills are composed of alternating layers of flint (chert)-bearing limestone and shale. Northeastern Kansas contains the remnants of the glaciers that once covered that part of the state.



Tornado Over Kansas, by J. Steuart Curry (1929) (oil)



Dust Bowl, by Alexander Hogue (1933) (oil)





## The Artists

I try to convey to ever-changing moods of the landscape and to show the effect of rain and wind on the surface of the earth. I like to paint lonely places because only when one is alone can he feel the immensity of space and realize his own insignificance.

Raymond Eastwood, 1968

The first artist known to make a pictorial record in the Kansas was **Samuel Seymour**, apparently of English descent, who accompanied the Major Stephen H. Long expedition in 1819–20 as a landscape painter. On his return he prepared numerous sketches and art works but unfortunately all but a few of them were lost or destroyed. Seymour's painting *Distant View of the Rocky Mountains*, however, was the frontispiece of the expedition's 1823 report (Evans, 1997).

A few hearty artists such as Theodore R. Davis (1840-1894), Paul Frenzeny (1840-1902), William Henry Jackson (1843-1942), Henry Learned (1844-1895), Frederick Remington (1861-1909), and Jules Tavernier (1844-1889) worked some in Kansas and made sketches mostly of frontier events and Indians. They were the artists of the 19th Century.

The 20th Century heralded in a new breed of artists starting with Birger Sandzén the transplant from Sweden to Lindsborg, Kansas where his work is on permanent display in the Sandzén Memorial Gallery. The list of artists represented here include three who are still working in the 21st Century and two (Eastwood and Sudlow) who were on the KU art faculty. John Steuart Curry (Kansas) probably is the best known as one of the three regional artists that include Grant Wood (Iowa) and Thomas Hart Benton (Missouri). Curry's *Tragic Prelude* (1938-1940), a mural in the Kansas Statehouse illustrating John Brown and the clash of forces in Bleeding Kansas, is widely reproduced and recognizable. The eight artists discussed here are

### Kansas Native or Adopted 'Sons' Regional Artists

Louis Copt (1949- ) Emporia

J. Stuart Curry (1897-1946) Dunavant

Raymond Eastwood (1898-1987) Bridgeport, Conn.

Philip Epp (1946- ) Newton

J. R. Hamil (1936- ) Hastings, Nebraska

Birger Sandzén (1871-1954) Blidsberg, Sweden

Robert Sudlow (1920-2010 ) Holton

Margaret Whittemore (1897-1983) Topeka



The Spencer Art Museum on the University of Kansas campus in Lawrence has an excellent representative collection of artwork of more than two hundred pieces by these artists; the largest collection is of Birger Sandzén's work.

**Robert Sudlow** concentrated his work, mostly oils, in three Kansas counties - Douglas, Chase, and Wabaunsee. Douglas County is in the Osage Cuesta country and some of his paintings are views from his house in the south-central part of the county. Chase and Wabaunsee counties are in the Flint Hills. His landscape oil paintings are made during one of the four seasons and *Snowfield South of Stull* (near Lawrence) and *Chicken Creek Whiteout* (near Tonganoxie) are representative of his winter scenes of the Osage Cuesta country...

*Snowfield South of Stull (Osage Cuestas)*, by Robert Sudlow (1986) (oil)





Chicken Creek Whiteout, by Robert Sudlow (1985) (oil)



I need to mediate upon the landscape....Painting for me is a sort of communion. I paint in the midst of the landscape... knowing that eyes are not enough. I wish for total immersion....in short, to paint is to participate, to extend ones senses, to work in sympathy with an utterly mysterious cosmos.

Robert Sudlow, 1987

Farther west in the Flint Hills **James R. Hamil** shows the *Konza Prairie National Area* in a watercolor and **Louis Copt** the *Cottonwood Gold* in an oil. In both paintings the bedding of the lower Permian resistant limestones in the distant hills is striking with the softer shales separating them. In the upper part of the Permian that is composed of red beds and evaporites in south-central Kansas is **John Steuart Curry's** *Spring Shower*, an oil, and Hamil's *Redbeds Near Medicine Lodge*, a watercolor. Hamil prefers to work in watercolors and has beautiful examples from many parts of Kansas.

Konza Prairie National Area (Flint Hills), by J. R. Hamil (n.d.) (watercolor)



Cottonwood Gold, by Louis Copt (2002) (oil)

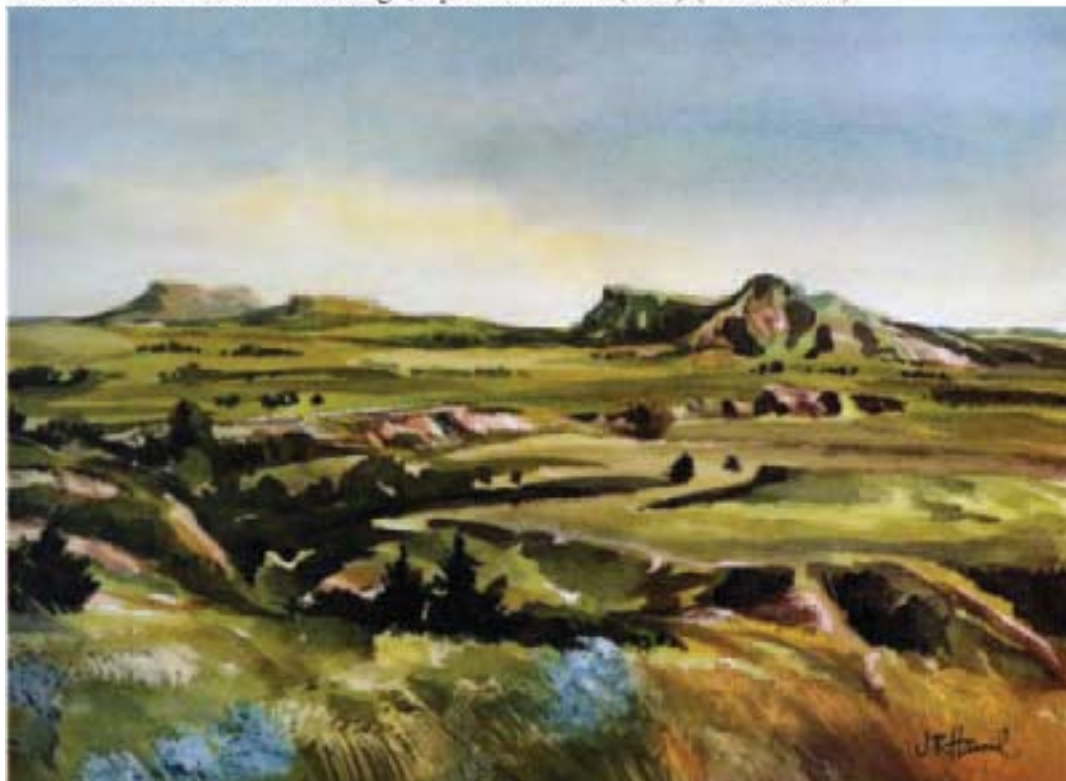




Spring Shower, by J. Steuart Curry (1931) (oil)

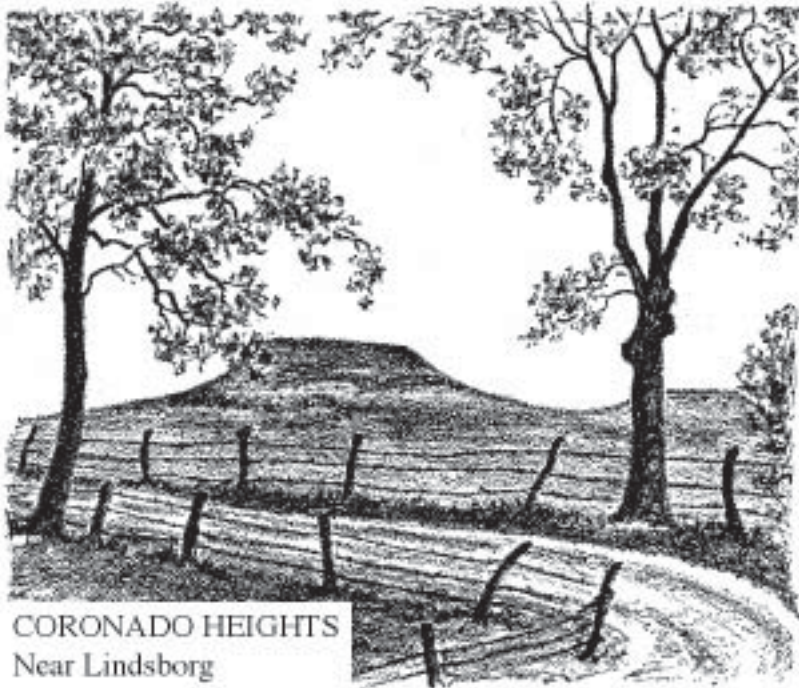


Redbeds Near Medicine Lodge, by J. R. Hamil (n.d.) (watercolor)

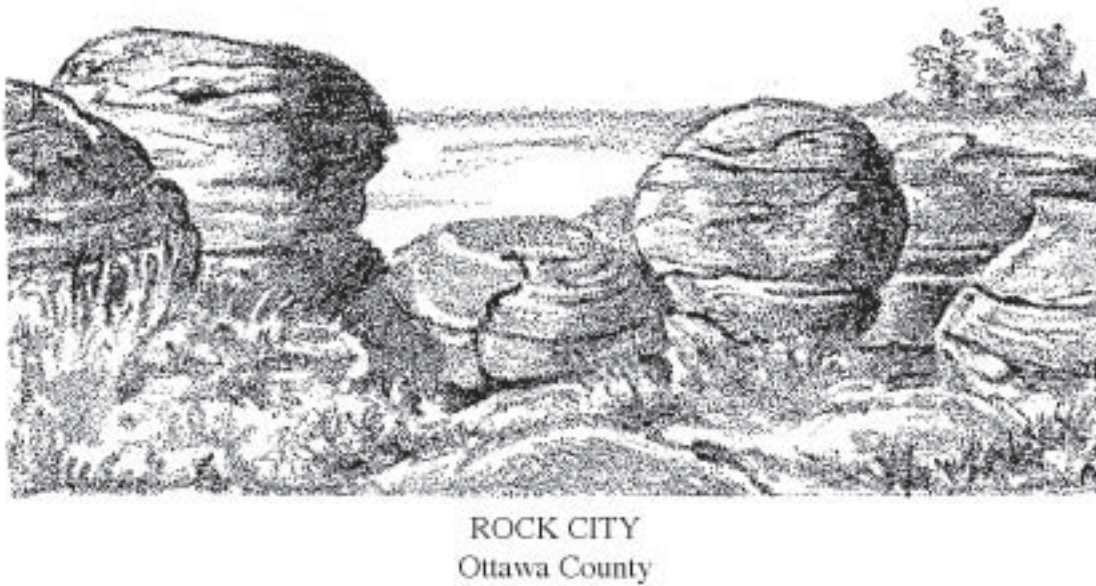


Farther west in central Kansas in the Smoky Hills are the younger geologic units of Cretaceous age, which are the subject of **Margaret Whittemore's** pen and ink sketches. She has put many of the known topographic touristy named rock formations formed in the Cretaceous Dakota sandstone on paper including Coronado Heights in southern Saline County near Lindsborg, Pawnee Rock in Barton County, and Rock City near Minneapolis in Ottawa County. Sketches seem to be her favorite media.

**Raymond Eastwood** painted dunes, arroyos, and mesas mostly at Cape Cod and in the American Southwest.



Margaret Whittemore  
pen & ink sketches  
no dates





Erosional forms, especially in the Cretaceous chalk beds of western Kansas, are a favorite subject of the artist. One of **Birger Sandzén's** favorite subjects are these forms, especially in Gove County. His wife's relatives had a home in the western part of the state thus his interest and focus on painting there. *Creek at Moonrise* (oil) and *Wild Horse Creek* (oil) are two good examples of Sandzén's style that he developed painting these rock units. He dabs on the canvas short thick 'slabs' of unmixed paint, which when the picture is viewed from a distance give a striking three-dimensional appearance. His lithograph of *Castle Rock*, formed in the chalk in the Monument Rock area of Gove County, is more traditional. There you can see the alternation of the thicker chalk beds and thin volcanic ash layers. Monument Rocks in Gove County as represented in a watercolor by Jim Hamil is striking.

Creek at Moonrise, by Birger Sandzén (1921) (oil)



Wild Horse Creek, Birger Sandzén (1921) (oil)





Monument Rocks in Gove County, by J. R. Hamil (n.d.) (watercolor)



The Prairie Castle (chalk beds), by Birger Sandzén (1918) (lithograph)



The High Plains, which are formed by debris from the Rocky Mountains, are depicted by **Philip Epp**. His renditions are striking of a horizon where you can see forever and the stark nature of the plains with big billowy white clouds. The *Windmill and Storm* with the distinctive overhead clouds is instantly recognizable as an Epp painting.

Windmill and Storm, by Philip Epp, (2006) (acrylic)





The Nebraskan and Kansan glaciers were the last geologic events before the Holocene and present. The soils and debris left by the glaciers are evidence of their presence. Included in the debris are the erratics, rocks that do not belong there, carried south by the glaciers from farther north. Hamil's *Glacial Erratics* (left by glacier in northeastern Kansas) watercolor portrays one of these rocks.

Glacial Erratics (Left by Glacier in Northeastern Kansas), by J. R. Hamil (n.d.) (watercolor)



*Acknowledgments.* Louis Copt was very helpful in guidance about the art and artists and reviewed a preliminary version of the manuscript. Kate Meyer of the Spencer Art Museum also kindly reviewed the manuscript. I would like to thank Jerry Van Leer and Melissa Powell for retrieving data from the university's collection in the Spencer Art Museum. This paper was presented at the Geological Society of America's regional meeting in Branson, Missouri, in April 2010.

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Photograph by author

