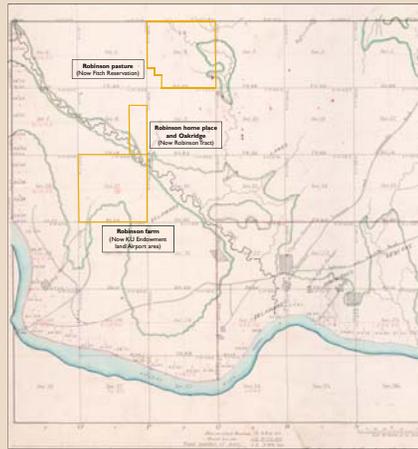


A changing landscape

This area of Kansas has been used by people for thousands of years, but it has changed dramatically in the last century and a half. Until the 1850s, it was predominantly prairie. The lush grasses and wildflowers provided food for bison and other native animals. Grazing by these animals and regular natural fires—along with later management by native peoples—kept the native prairie stable and healthy. However, a new era of drastic ecosystem modification began in the 1850s and 1860s with the influx of Euro-Americans. They rapidly established farms, roads, towns and commerce. In the 1850s, 95 percent of Douglas and Jefferson counties was tallgrass prairie. Today less than 1 percent remains.



(Above) 1861 Government Land Office Plat Map. Note the distribution of forests, outlined in green (including the wide belt along the north bank of the Kansas River) prairie dominated the landscape. Cultural features such as farmed fields and roads are present. Gold-highlighted areas show land bequeathed by Charles and Sara Robinson to KU. (Large map, right) 1873 plat map of a portion of Grant Township. (Right) Sara Teppan Doolittle (Lawrence) Robinson, 1827-1911, and Charles Robinson, 1818-1894.



Words from Henry Fitch

On rural family life

"As far as I'm concerned, this was an ideal setup for raising a family. There was plenty of outdoor space for kids to play. They were free of some of the bad influences kids come in contact with in the city and there were plenty of jobs to keep them out of mischief. They enjoyed the tasks I put them to."

—In an interview with the Lawrence Journal-World, June 3, 1979

On career choices

"I never regretted it. I wouldn't change a thing. In general, I think that people who work with animals in the field, whether snakes or birds or rodents or monkeys, find it deeply satisfying and wouldn't trade it for any other kind of career—even though it may not be very rewarding financially."

—As quoted in L. Hattberg, *Kansas People, 1991*, when asked about a career as a field biologist

On field research safety

"I was bitten twice by rattlesnakes [in California, 1938 and 1940] ... Since that second bite, I have never let go of a poisonous snake without first holding down the head, having learned the hard way."

—In a 1998 interview for the *Journal of Cores*, published 2000

On changing attitudes

"When Fitch began his work in the late 1940s, there was some suspicion, and even hostility, in the local community about a 'reservation,' and especially the idea that all species were to be protected, even snakes. This attitude changed over the years, especially as Fitch educated generations of people about the natural environment."

"I was very pleased by the friendly and cooperative attitudes of our neighbors."
—In a July 2005 letter regarding a community meeting on plans for the adjacent McCull Reserve

On conservation management

"It is ironic that on this area dedicated to preserving native flora and fauna and protected from anthropogenic disturbance for more than half a century, a large portion of the herpetofauna has been reduced by natural succession. However, perhaps it should not be surprising. In this area, prairie is maintained as a fire or fire and grazing subclimate, and the balance can easily swing toward brush and forest when fire is suppressed."

—In *Herpetological Conservation and Biology*, 2006

Cultural history

Ancient peoples

Current estimates place humans in Kansas about 13,000 years ago. We know little of older cultures here because no evidence of pre-Clovis people has been recorded in the state. Occasionally a stone tool or flaking is found, indicating human presence.



Fragments of flint tools found in the area of the KU Field Station include a broken point of a larger piece (left) and an undomed flake (right).

The Kanza

About 500 years ago the Kanza (also called the Kaw) controlled this area. They were a small tribe with Siouan affinities and were known to make annual hunting trips to the west for bison. The Kanza were moved from this area by treaty with the U.S. government about 1820.



George Catlin sketched this group of Kanza people sometime between 1860 and 1870.

The Delaware

From 1829 to 1854 this area north of the Kansas River, including the Fitch Reservation, was a reservation for the Delaware tribe. They originated on the East Coast and were moved successively farther west and south by treaty with the U.S. government. They are reported to have lived much like their pioneer contemporaries while here, with farms and crops, but no use of the Fitch Reservation is known.

ca. 1860-1911

Charles Robinson, the first Governor of Kansas, and his wife, Sara, acquired 1,300 acres of land in Grant Township in the late 1860s. These holdings included Kansas River floodplain (surrounding what is now the Lawrence airport), hillside land to the north of that (known as Oakridge, where the Robinsons built a home around 1870), and the land where the Fitch Reservation is now located (known at the time as the Robinson Pasture). The Robinsons bequeathed their lands to KU, and in 1911, when Sara died, KU assumed ownership.

1911-1947

The 590-acre area was known as the "Robinson Farm" and was leased by KU for farming and grazing. During the 1930s conservation activities took place (fencing some hillsides to exclude livestock and promote timber growth, and building check dams to control erosion). In the 1940s, conservation lost emphasis (overgrazing and unsupervised harvesting and hunting of native plants and animals).

Fire, cow, ax and plow: How Euro-American settlers altered the landscape



Fire
Settlers suppressed the wildfires that formerly swept for miles across the region. These fires were essential in maintaining the tallgrass prairie. Interacting effects of fire, native grazers (e.g., bison), drought, pest outbreaks and other factors kept trees and shrubs in check.



Cow
Settlers introduced many species—animals and plants—that were new to the area. Many of the animal species replaced native species (e.g., bison, elk, deer).



Ax
Settlers used the limited timber resources for heating, cooking and building. They also fenced forested areas for grazing, and in situations with rich bottom land, cleared forest for farming.



Plow
Settlers destroyed the prairie directly by plowing it to plant crops.

1861 High Plains photo of Charles and Sara Robinson on the wagon (Henry Fitch, The Lawrence Journal-World, 1979). Photo by George Catlin, 1860-1870.

Geological history

More than 300 million years ago this region was covered by an inland sea. Inundation for millions of years resulted in deposition of materials, including fossils, and formed the Oread Limestone. Various strata of the Oread Limestone are seen as rock outcrops at higher elevations on the trails. Rock from the Oread Limestone has been used as foundations for buildings, crushed for gravel for roads (there is an old quarry on the Reservation), fencing (especially before barbed-wire was available) and landscaping.



Chester Fitch, age 5, provides a sense of scale in this April 1959 photo of "Rattler Ledge," a limestone ledge on the KU Field Station's Rockefeller Tract. The photo was originally published in Henry Fitch's *Autobiography of the Copelands*, published by the KU Museum of Natural History in 1960.

Roughly 700,000 years ago, a Pre-Illinoian glacier encroached on this area, later melting and retreating northward. The Kansas River generally represents the southern extent of the advance of that glacier. While hiking here, you occasionally may encounter stones that are atypical of the area, such as granite or, more commonly, quartzite. Termed "glacial erratics," these were transported from hundreds of miles away by glaciers and thus are indicators of the glacial history of the area.

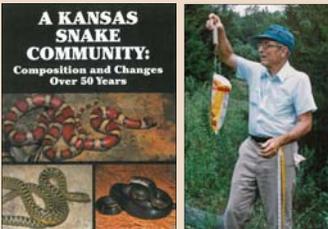


A glacial erratic is a piece of rock that differs from those normally found in the area, such as this piece of quartzite used in a fence of limestone rocks.

Henry Fitch found rock outcrops to be important habitat for animals. For example, he found that snakes favored prominent outcrops, particularly warmer spots with a southerly exposure. Reptiles follow the fissures deep into the formation to find milder temperatures and safety from predators during hibernation periods. Fitch's findings that many kinds of animals depended on the rock walls and ledges—which now may seem obvious—provided new insight decades ago.

A scientist, a sense of place

Fitch's book *A Kansas Snake Community*, published in 1999, reports data gathered during a 50-year study that included 18 snake species and more than 32,000 capture records. It represents one of the longest-running studies of vertebrates ever conducted by an individual at a single site. Reviewers understood the groundbreaking nature of the book and the work on which it was based. One reviewer, David Seburn, wrote, "Quite possibly no one has caught more snakes than Henry Fitch." Another reviewer, Indraneil Das, wrote: "What is different between this study and virtually any study done on snakes in general or, for that matter, anything living, is the enormous temporal scale involved. Scale is of tremendous significance in ecology."



In an obituary published in *Reptiles and Amphibians: Conservation and Natural History*, M.L. Griffey wrote, "Those who will only meet him through reading his biography, his lifetime of scientific writings, or others' memoirs will not begin to understand even half the man behind the name—but those who take the time to hear the subtext within the stories of this remarkable giant among men will doubtless be blessed for the effort."

Fitch's book was met with many reviews that extolled the research effort and intellectual acumen required for its synthesis. But Fitch himself expressed gratitude for the commitment of the young family that arrived in 1948: "Special thanks are due all members of my family for their long-term support and assistance: my wife Virginia, my sons, John and Chester, and my daughter, Alicia." (Right) Fitch weighing a Black Rat Snake captured at one of his trapping locations.