



Kansas State University Libraries
New Prairie Press

Symphony in the Flint Hills Field Journal

2022 - Weather in the Flint Hills

Lightning Fields

Leslie VonHolten

Follow this and additional works at: <https://newprairiepress.org/sfh>

Recommended Citation

VonHolten, Leslie (2022). "Lightning Fields," Symphony in the Flint Hills Field Journal.

To order hard copies of the Field Journals, go to shop.symphonynintheflinthills.org.

The Field Journals are made possible in part with funding from the Fred C. and Mary R. Koch Foundation.

This Event is brought to you for free and open access by the Conferences at New Prairie Press. It has been accepted for inclusion in Symphony in the Flint Hills Field Journal by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.



Storm, Night
Kristin Goering

LIGHTNING FIELDS

“Kansas brags on its thunder and lightning,
and the boast is well founded.”

Horace Greeley, 1859, “An Overland Journey”

When you walk on a healthy prairie, you — your very body — are usually the highest point. Lightning will seek you out. Clouds roll in fast, but in these big skies, at least you see them coming. It’s best to run to the low point of a wash or a creek bed, if you can, but do avoid those creek trees. Cattle sheltering under a cottonwood is a not-uncommon way to lose a small herd. One rancher even lost 20 head when lightning traveled down a fence line, so you should avoid fences, too.

Lightning was the original land manager; the prairie survived 10,000 years because of it. Fires sparked by bolts traveled for miles until rain or rivers stopped them, burning woody growth and opening the landscape for tall grasses to dominate. These grasses fed bison, elk, antelope and a mosaic of bugs. Although it seems that fire would be devastating for ground-nesting birds, lesser prairie chickens — those odd-necked, dancing and endangered fowl — live and breed better in habitat with a buffet of grasses, forbs and insects, which prairie burns accommodate.

When the prairies do not burn, cedar trees and shrubs choke out the grass that bison and cattle, prairie chickens and grasshoppers, depend on. Grass and trees are not cohabitants; tree canopies block necessary sunlight. Warm season grasses like big bluestem, switchgrass and Indian grass — those protein powerhouses native to the Midwest — thrive after an early spring thunderstorm and fire. This is because native grasses put their

energy investments into their deep root system, which can go as far as 15 feet underground. Trees do the opposite, investing in their trunks and branches, reaching into the sky above.

The tallgrass prairie was the hunting ground for the Kanza, Wichita, Osage and others. Prehistoric hunters noticed that bison were especially attracted to the tender grasses that emerged from the scorched earth. No longer waiting for lightning from the late winter storms, the Kanza implemented controlled burns of the prairie. This allowed the grasses to dominate, the bison and other ruminant beasts to prosper, and the Plains tribes to sustain themselves through the brutal winters. The Kanza words for lightning are *galéleze* (lightning), *yuléleze* (forked lightning) and *yuónba* (sheet lightning). Walter Kekahbah, the last fluent speaker of the Kanza language, died in 1983.

In my memory, I am standing in the gravel driveway, barefoot, feeling the air turn heavy. A thunderstorm is coming. Our massive old barn, which we never used because it was already failing when we moved here, is silhouetted against the churning sky. We explored it one hot August day, secretly, when Mom was occupied with canning. Inside we found

a clowder of feral cats; one great horned owl; a box of old rotary telephones; a sheep's skull; and two massive, rusted pulleys.

The storm: The air is heavy and, suddenly, hair on my arms reaches up to meet it. *THWACK*. The lightning slams into the roof of the barn, which smolders. We run into the house; rain is coming across the pasture, hard and white with mist. The fire sputters out before it takes, and the barn lives to see another day. Two years later, our down-the-road neighbor Clinton will tear it down for scrap wood.

It was not this storm but another one when the house was hit by lightning sometime during the school day. We returned home to find glass from the fuse box blown across the sun porch, and our television smelled like smoke.

Prairie people once believed that yellow-flowered compass plants attracted lightning. We now know it is because the plants, at 10 feet tall, are often the tallest earthbound beings on the land, along with cottonwoods and fence posts. Compass plants are not sunflowers, which people often think because of their joyful late-summer blooms. Compass plants are wise in their way, orienting their leaves north-south for protection from the intensity of the summer sun.



Sky
Kristin Goering

Hence their name. Read the leaves and know the direction you are traveling.

Another belief, but this one is probably true: Coyotes will not eat a cow that has been struck by lightning. When approaching a mysteriously dead cow, look for hooves blown away from the body, loose teeth, a hole in the hide, a certain smell, a tree nearby. Lightning has probably struck.

Cattle trail cowboys described many forms of lightning: flash; forked; chained; and ball lightning, which rolled along the ground. Sometimes Saint Elmo's Fire sparked by lightning caused the horns

of steers to glow blue. In his memoir, cowboy G.W. Mills said, "The air smelled of burning sulphur; you could see it on the horns of the cattle, the ears of our horses and the brim of our hats." Saint Elmo's Fire, named for the patron saint of sailors, was considered a good omen when witnessed at sea between the masts of a ship.

Sitting high on your horse, though, made a lightning strike a mortal risk. Stampedes triggered by lightning and thunder were another. One storm ignited a stampede of 3,000 head of cattle across 20 miles. Lives were lost.

Laura Ingalls Wilder tells another story, this time of ball lightning that

traveled down the stovepipe and into their pioneer cabin. The electricity did not have a fuse box or television to go for, so it traveled across the room to Ma's knitting needles before it flamed out.

The prairie after a thunderstorm is vibrant, green, humming with beauty. The rain glistens on the grass; the birds come out again. Lightning separates nitrogen atoms in the air, which then fall to the ground and create nitrates, vital for plant growth. The bright green after a storm is the result of this nitrogen bath.

Lightning is a partnership between earth and sky, a meeting of positive and negative charges. In its way, lightning blooms upward from the ground like the compass plant, the sunflower, the blue grama and Ohio horsemint and penstemon and rattlesnake master.

Columbus Johnson was a small child when his mother, a woman working to purchase her freedom, was struck dead when the tree she was next to was hit by lightning. This ignited an epic life for her young son. He was taken to Tennessee and auctioned. While enslaved, he learned harness making and carpentry, learned how to read and write, stayed up on current events, and then fought in the Civil War. Columbus was mustered out

a free man and found his way to Topeka, where he worked with the Freedman's Aid Society in settling the prairie. A man of his era, with a strong belief in self-determination, he moved to the Flint Hills and co-organized the Farmers Bank of Dunlap in 1884. Columbus Johnson is buried in the Dunlap Colored Cemetery, a national historic site down a low-maintenance dirt road atop a hill in Morris County.

How to make cloud-to-ground lightning: Take positive electrical charges from Earth; negative charges from the base of a cloud; and, for good measure, a plant in between. Form a cloud-to-ground "stepped leader" at the base of the cloud out of a faint, negatively charged channel. At ground level, throw some electric channels up to make ground-to-air "streamers." Connect the streamers to the leader, making a bright pulse of lightning. Add more pulses of light with "dart leaders" and "return strokes." Mix. Serves heat and shock waves, which spark fires, loosen teeth, kill mothers under trees, burn barns, and seek out knitting needles and black-and-white television sets.

Leslie VonHolten is a Kansas-based writer whose work explores the connections between land and culture.



Line Storm

John Steuart Curry

Provided on behalf of the John Steuart Curry Foundation & Estate,
Kiechel Fine Art, Lincoln, NE