

Sand Prairie-Scrub Oak Nature Preserve: A 30-Year Perspective on Meanings and Change

By Thomas V. Lerczak

In the summer of 1991, I moved to Mason County in central Illinois. I was to begin what would be a twenty-eight-year career with the state of Illinois in the field of natural resources. But even before getting settled into my new surroundings, my first priority was to find large natural areas nearby where I could wander all day by sun and compass. So naturally, I was attracted to Sand Prairie-Scrub Oak Nature Preserve (1,515 acres), about eight miles south of my new home. It remains one of my favorite places in the Midwest, even though recent visits have been few and far between.



Sand Prairie-Scrub Oak Nature Preserve, Fall 1992

But this winter I had the opportunity to re-visit Sand Prairie-Scrub Oak Nature Preserve with a

friend, and I once again enjoyed experiencing the preserve's special features and wilderness feeling, especially seeing it through the eyes of someone experiencing it for the first time. The day's adventures reminded me of my first visit in 1991, which I described in an essay called "Mississippi River Full Circle":

[Given the emphasis on prairie in the preserve's name,]... I was surprised to find such a heavily forested site. In the large prairie that I expected, I would be able to see where I was going, but in a forest without trails, I was a bit intimidated, and so I brought along a compass. Carefully entering the woods on a warm July day, I proceeded westward. The preserve measures one mile from east to west and about two and a half miles from north to south; so I planned to walk about a half mile west and then turn northwest to see what I could find. Very quickly, the small parking lot with my vehicle was obscured by trees; all I could see in any direction were more trees. But a short distance ahead I soon noticed some prairie vegetation; it was a small opening in the woods, with enough light to support a little bluestem-sand lovegrass community. The gnarled blackjack oaks, prickly pear cactus, and open sand gave it a desert-like feel. I earlier read that during the waning days of the last ice age as the climate warmed, the sand now in Mason County had been

brought down the Illinois River valley in glacial melt waters and then blown by prevailing winds into upland sand dunes. The quiet was almost overpowering. I continued walking slowly westward while the narrow prairie opening gradually became a bit wider, but then it ended abruptly in a wall of forest. Here I turned to the northwest and soon noticed a larger opening ahead through the trees. I thought this must be the western boundary of the nature preserve and I expected to see boundary signs or a road. But no; this was an even larger prairie opening with large, widely scattered, black oak trees: I was looking at a remnant sand prairie and savanna, one of those rare, hidden pieces of the original Illinois landscape. I climbed about half way up the slope of a small rise, took a seat among the prairie grasses and wildflowers, and remained still. The only sounds were of insects, the gentle breeze, and a singing eastern towhee.



Prairie opening at Sand Prairie-Scrub-Oak Nature Preserve, winter 2013

In those days, I had only recently absorbed new and developing ideas on the dynamic aspects of ecosystems, especially when considered from a long-term perspective; I understood how they functioned in an abstract, statistical way, but had only begun to appreciate theory from plant ecology textbooks and scientific journals within the context of what I could actually see in the real world. The biggest revelation I had at the time, though, was discovering how Sand Prairie-Scrub Oak Nature Preserve and other nature preserves across the country were being actively managed to maintain or guide natural communities toward a preferred condition.

Of course, the removal of aggressive plants not native to Illinois made immediate sense, but resource managers of natural areas would also determine how many trees of this or that native species should be considered appropriate and where they should be growing; such determinations are extended to other plants as well, according to an official site management plan. Management goals are accomplished by using controlled fires (referred to as prescribed fires), hand tools, chain saws, and herbicide. Once, after presenting an evening talk on management of natural areas, a colleague asked, “So there is no longer anything natural in Illinois?”

“Well,” I answered, “that depends on your definition of the word ‘natural.’”

In 2016, *Big Muddy: A Journal of the Mississippi River Valley* published my essay “Change and Comfort in Nature” in which I examined how I came to terms with the idea of managing a natural area:

The preserve [Sand Prairie-Scrub Oak Nature Preserve] is a mosaic of remnant and restored sand prairie, woodland, and savanna; it has been managed by the Illinois Department of Natural Resources with controlled fires for several decades. With an excellent fuel source of dried oak leaves and prairie grasses, the fires can be intense, especially with warm temperatures, low humidity, and even moderate winds. Yet even though trees may show fire scars, most survive the fires intact. Saplings are typically top-killed, but readily re-sprout from the undamaged root systems, later sending up multiple shoots. Fire management may have slowed the advance of the woody vegetation onto the sand prairies, but the advance continues nevertheless. The prairies have not advanced into the woodlands, despite all of the controlled burning.

Because decades of fire management have not been adequate to maintain the natural communities

at this site, as a desperate attempt to reverse these successional changes to a previous state, to prevent further loss of the prairies, state biologists have made the decision to begin cutting back the advancing oaks with chainsaws and treating the cut stumps with herbicide, thereby preventing regrowth. On one workday, I joined a crew of resource managers to cut advancing oak trees on the periphery and within the highest quality prairie opening at the preserve. At day’s end, I looked back upon our work at this nature preserve, a site that has had a special place in my life for over twenty years, a place to escape the rigors and complexities of the modern world, not just in imagination but in reality; it is a place wherein, according to the Illinois Natural Areas Preservation Act, which allowed for the creation of the Illinois Nature Preserve System, “...one may envision and experience primeval conditions in a wilderness-like environment.” What I saw were slash piles and stumps, and my feelings were ambivalent. But what was the alternative? Continued succession to forest and eventual loss of the prairie, and I did not wish that. And what of the primeval, wilderness-like qualities? Does a natural area maintained with chain saws and herbicide still qualify to be called a natural area? Perhaps imagination must now play a larger role.



Oaks encroaching on prairie at Sand Prairie-Scrub Oak Nature Preserve, 2014



Sand Prairie-Scrub Oak Nature Preserve, winter 1992-93 (Same scene as in first photograph)



Sand Prairie-Scrub Oak Nature Preserve, 21 January 2021 (Same scene as in first and previous photographs)

In 1992, I took some photographs of the landscape where I first saw the sand prairie and savanna at Sand Prairie-Scrub Oak Nature Preserve, where I felt as if I had gone back in time 400 years to view the original Illinois landscape, where if a cougar chasing an elk had run across my view, I think I would not have been surprised. On my return this year, I again photographed that same scene from the same vantage point, and there is no doubt that changes have occurred. In 1992, acorns from the surrounding woodlands, which seemed dense with undergrowth, had already been sprouting up further into the sand prairie. By the time of this year's visit, oaks encroaching on the prairie and filling in the forest understory in some areas had already been cut to ground level, rendering the overall area much more open; and the lone mushroom-shaped oak seen in the 1992 photo had been dead for a while, probably killed from an intense prescribed fire. But this management has been done in such a way that the scene appears natural, not the work of managers...exactly the way, in fact, natural area management should be done.

Twenty years ago, I walked over Sand Prairie-Scrub Oak Nature Preserve following a very intense fire on an autumn day of low humidity, high temperatures, and high winds; during the fire, prairie grasses lit up like gasoline, and five-foot flames roared through the woodlands, fueled

by years of leaf and woody debris accumulations. Leaders in the field of natural resources had been harping for years at conferences that a fire like this was exactly what was needed to encourage prairie over forest. At the time, I was studying overwintering red-headed woodpeckers that used the preserve in varying numbers from year to year. The following passage is from in my book *Side Channels*, in Chapter 13, entitled “Dead Trees, Disturbance, and Illinois’ Red-headed Woodpeckers”:

Frequent fires ... [at Sand Prairie-Scrub Oak Nature Preserve] have left their mark on the landscape. Ultimately, and taken to the extreme, fire favors grassland over trees. Though black and blackjack oaks at the preserve have thick bark and are fairly fire resistant, they are not immune from damage. And if a collection of fallen branches, twigs, and leaves has gathered at the base of a tree, a hot fire can do extensive damage. Eventually, a fire-damaged tree will have fire scars, where fungi and bacteria can enter, and dead branches and dead wood within the trunk where parts of the tree can break off during strong winds ... [Snags] and fire-damaged trees in these upland oak woodlands play a necessary role in maintaining the ecological health of the system as a whole

I once stood at Sand Prairie-Scrub Oak Nature Preserve over the

faint, lightly tinted image of a log in charred dust—all that was left of the log following a fire of major proportions. The image suggested that even within this complex mix of destruction, ecological balance, and rebirth, the red-headed woodpecker has made a home for thousands of years.

I need places like Sand Prairie-Scrub Oak Nature Preserve in my life, places to experience that indefinable wilderness feeling, a feeling that was still intact on my most recent visit. Since I will continue to visit this site every now and again, I guess I should plan on doing another thirty-year photo shoot in 2051, perhaps on my 94th birthday. What a wonderful gift that would be.

Selected References

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