

A Mount Mitchell Heritage Prairie Update, and a Restoration Challenge

Our friends, Ed and Seliesa Pembleton were leading a NATURALIST JOURNEYS tour to Kansas prairies in 2009. One of the last stops was Mt. Mitchell. They were impressed, and Ed proclaimed that:

“The Mt. Mitchell Heritage Prairie Preserve has the most diverse flora of any prairie that we have visited in the Flint Hills.”

A brief article that appeared in the Spring/Summer 2014 edition of *PRAIRIE WINGS* read as follows:

“Audubon of Kansas wildlife sanctuaries are designed to combine conservation of treasured natural areas and demonstration of management and stewardship, with opportunities for nature appreciation. The wildflowers, native grasses, birds and other wildlife provide a glimpse of the diversity of life that exists within pristine prairie plant communities. Although the sanctuary is only 47 acres, the 32 acres that were previously held by the Kansas Historic Society are viewed as one of the best examples of native prairie in the northern Flint Hills. AOK acquired the additional 15 acres to encompass the entire prominent hill and to provide better access.

Most other prairie remnants have been mowed annually, and tragically many have been sprayed with herbicides to eliminate “weeds” from the hay. Everything except grasses are regarded by many people as weeds! The same approach is often taken with native rangelands. Livestock grazing often eliminates some of the species and changes the composition to those that best tolerate grazing.

Mt. Mitchell is located three miles south of Wamego and it is jointly managed with the Mt. Mitchell Prairie Guards. The Guards have provided leadership for interpretation of cultural history—especially relating to the struggle to make Kansas a Free State and the thread of the Underground Railroad through this area—and made major improvements to enhance the visitation experience.”

The foremost objective of AOK has been to preserve the biological diversity of the prairie, and to use it as an educational resource to instill appreciation for, and an understanding of, the importance of protecting prairie flora and fauna. Prairie flora consists primarily of grasses, sedges, forbs and shrubs. Collectively, this array of plants and the soil beneath support an astounding diversity of invertebrates, which in turn (along with plants seeds and fruits) provide food for birds, reptiles, amphibians and mammals. Additional articles in this edition of *PRAIRIE WINGS* expand on the value of shrubs and forbs for birds as habitat and the importance of forbs for beneficial pollinating insects and hummingbirds.

The concept of joint management that AOK celebrated requires a joint vision to assure success, along with collaboration. Unfortunately, to the astonishment and disappointment of AOK staff and Trustees, it was discovered during the 2014 Independence Day weekend that the Mt. Mitchell prairie had just been sprayed with a cocktail of herbicides. Although it was suggested by an individual

responsible that the intent was to “spot spray” the dogwood and other woody thickets to get rid of them and keep them from expanding, it became evident that 80 percent of the property had been sprayed. This was obvious from all sides, including from Highway 99 a half mile to the west. A few months earlier one of the same individuals insisted that they should take complete control and AOK should relinquish ownership! That would have been a mistake on our part.

Although the view of AOK was that this unexpected action was “unauthorized and destructive,” it was argued by the proponent(s) of the spraying that it was “needed and beneficial” to make it a suitable “park.” One individual argued that it shouldn’t be a preserve or a sanctuary with islands of shrubs. The AOK view is that it is best when it is both—a natural prairie and a place where people can appreciate both nature and the historical heritage of the area. Natural “islands of shrubs” have provided nesting habitat for Bell’s Vireos and other species.

A survey, commissioned by AOK and conducted by a native-plant authority in the weeks that followed the spraying, determined that many broadleaf plants, including a number of the fifteen “high conservative species” found on the property, were killed or severely damaged. The same is true for 71 “medium conservative species.” This high number of conservative species on the property indicated that it is a highly intact plant community. Among the most obvious changes noted this year were the dramatic reduction in abundance of wild prairie rose, leadplant and Missouri primrose.

Herbicide spraying opens up voids within the prairie and they can become portals for invasive species, such as Caucasian Bluestem. The voids were substantially filled this year by annual sunflowers and ragweeds. Over time these early successional annuals will be replaced by native perennials, hopefully not just grasses but rather a complement of forbs and shrubs.

Going forward, our plan is for AOK to be exclusively responsible for stewardship of the flora and fauna. We remain receptive to partnerships in other aspects of outreach and maintenance of the trails, conditioned on a formal memorandum of agreement.

In late March we conducted a controlled burn to remove excess residual grass cover from the previous two years and dead plant material resulting from the spraying. Fortunately the residual grass present in 2014 helped to shield some of the smaller forbs from the full killing impact of the herbicides. This year’s early spring burn improved conditions for regeneration of forbs that survived and for seed germination within open areas. Spring and summer rains were beneficial. Prescribed burning will be utilized again in early spring 2016. If we have a problem with too much woody cover of large shrubs or trees in the future, we will effectively utilize mechanical control. Meanwhile the prairie remains spectacular, and with careful management we trust it will be almost completely restored with a measure of time.