

# A Prairie Calling

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FRIENDS OF  
NACHUSA  
GRASSLANDS



Photo: Dee Hudson

## A Short History of Landscape Fire

By Bill Kleiman, *Nachusa Grasslands Project Director*

**E**arth has enough oxygen that when dried plant materials catch a spark, by lightning or by people, a landscape fire can start. Indigenous Peoples had been using landscape fire in North America for thousands of years. Over all those centuries starting a landscape fire would have been a comfortable response to a sunny late fall or early spring day.

Fire made the landscape productive by keeping the landscape open, with fewer brush and briars, making it easier to walk through, easier to find plants for sustenance. Fires yield extra nutrients and sunlight, so plants would grow well the following season, producing abundant seeds and fruits. Imagine baskets full of rose hips or raspberries hand-picked from prairies! Picture families with full bellies from nutritional tubers dug up from among various sunflowers, such as Jerusalem artichoke.



Pasture rose hips  
Photo: Dee Hudson

Little  
bluestem





Landscape fire yielded lush growth of plants with useful fibers, such as grooved yellow flax, sweet grass, and various wetland rushes. Such fibers were useful for thatch roofs, woven baskets, floor mats, cordage, brushes, and brooms, both functional and beautiful.



A landscape blackened from fire would green up quickly in spring, and the lush growth would attract deer, elk, bison, turkey, grouse, and other wildlife. Predators would come for the prey. Humans would be there for the bounty of all that their fires produced.

Although we produce smoke during our prescribed fires, which is in part carbon, in the context of global climate change there is a net storage of carbon added to the soil. This soil carbon is from all those roots of plants growing and roots being cast off to grow more roots. The carbon-rich soil is a result of this process.

Above: A sequence of images taken in the same location, beginning with a controlled fire, then blackened ground the next day, and a few weeks later the spring green-up. There are a few old dead oaks in there that likely died from oak disease. Photos: Bill Kleiman and Charles Larry

Background smoke photo: Charles Larry



The prairies, savannas, woodlands, and wetlands in our region need these landscape fires to continue improving. Without fire our habitats wither, our prairies become full of brush, and ground cover reduces to common weeds and mud, its soil exposed to erosion. Animal species that depend on these habitats are diminished.



Left: Native plants, such as this pasqueflower, are adapted to fire. Photo: Dee Hudson



Without fire, the invasive Amur honeysuckle began to encroach and occupy the landscape floor. Photo: Charles Larry



Above: Foxglove beardtongue, *Penstemon digitalis* Illustration: Betty Higby



A prairie fire break is raked in preparation for a burn. Photo: Bill Kleiman

Prescribed fire requires preparation and care in our modern context. We spend weeks preparing fire breaks and days loading and caring for our fire equipment. Our fire crews are trained and tested annually. We use sophisticated weather predictions and follow careful protocols.

Below: At the yearly fire refresher participants practice starting the pumper units. Photo: Dee Hudson



Photo: Dee Hudson





Photo: Charles Larry

We get the job done. The fires in our oak woods have brought back much of their health. Young oaks are growing and competing. The ground layer plants are more varied with grasses, sedges, rushes, and wildflowers. These plants are pretty, yes, but also important for the insects and other animals that depend upon their blooms. Our prairies are often brush-free.

Our wetland sedge meadows are dominated by sedges, not box elder and willow.

Europeans new to this continent debated the Indigenous Peoples use of prescribed fire, with some parts of the country continuing landscape fire, but prescribed fires were mostly not tolerated. Lack of fire meant that protected natural areas would keep filling with

brush and small trees. The flora frequently collapsed in the shade of the brush. By the 1960s the consensus was growing that fire-adapted habitats needed fire.

The Nature Conservancy is celebrating 60 years of prescribed fire.



Purple prairie clover  
Illustration:  
Betty Higby



100% Recycled



Photo: Dee Hudson

Bill Kleiman

Bill is an RXB2 Burn Boss leading over 400 fires. He has directed all aspects of land management, habitat restoration, and the volunteer stewardship program for the 4,000-acre Nachusa Grasslands preserve since 1993. Bill is the fire manager for The Nature Conservancy (TNC) in Illinois. He has been a director with the Illinois Prescribed Fire Council (IPFC) since its inception. Bill is a member of TNC's Fire Management Advisory Team.

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