A Prairie Calling 1880 E 10 - February 2023





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.

Photo: Dee Hudson



Pasture rose hips Photo: Dee Hudson

Little bluestem



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

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.

Background smoke photo: Charles Larry



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



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



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

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

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.



Above: Foxglove

Illustration: Betty

beardtongue,
Penstemon digitalis

Higby



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

Conservancy (TNC) in Illinois.

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.

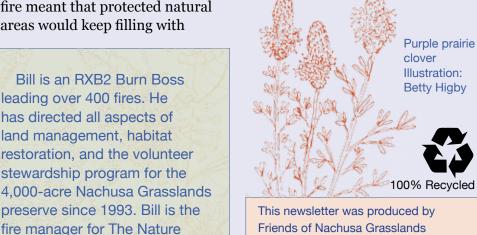


Photo: Dee Hudson

Bill Kleiman

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.

Editor-in-Chief: Charles Larry
Editor: James Higby
Illustrations: Betty Higby
Design: Dee Hudson
Website: www.nachusagrasslands.org

volunteers: