

FIRE ON THE PRAIRIE

Fire is a natural force that helped to create the vast prairies of the Mid-American continent millions of years ago. The fires were started by lightning strikes and later by Native Americans who used it as a hunting tool. Native plants and animals adapted to a habitat periodically rejuvenated by fire. These fires which roared across the hundreds of miles of prairie were an awesome sight and kept trees, brush, and alien plants from invading the grassland.

Controlled prairie fires are scheduled in advance. Burn plans are drawn up and must be approved by the site owner. Permits are obtained from the Environmental Protection Agency and the Illinois Environmental Protection Agency. On the day of the burn, the Illinois EPA as well as local fire departments and home owners in the immediate area are notified to ensure the safety of residents and to protect property. Weather conditions are carefully monitored. Burns are cancelled if wind direction, wind speed, and relative humidity are not right for a safe fire.

Restorationists at The Indian Boundary Prairies are trained in conducting controlled burns, putting in many hours of study and practical experience. Strict procedures are followed in preparing the burn site. First, a fire lane or break is mowed so that the fire is contained in the area that was selected to be burned. Next, a line of fire is ignited along one edge of the site. As the fire moves over the designated area, crew members with special equipment work with it for a safe and profitable burn.

Water tanks are used to keep the flames from spreading into other areas and to later help in putting out the fire. Fire swatters or flappers are used to smother flames that have gotten away. A fire broom, sometimes soaked in water, might be used with a sweeping motion parallel to the line of the flames to sweep away combustible material or to extinguish flames. Once the selected area has been burned, workers survey the ground and extinguish any remaining hot spots.

The benefits of fire to the prairie ecosystem include the nutrients being returned to the soil from the burned grasses. The blackened earth absorbs sunlight and warms faster, promoting the early flowering of spring species. Non-native plants, which have a shallower root system, are hampered and held at bay allowing the native grasses and wildflowers to thrive.

References:

Betz, Robert F. (2011) *The Prairie of the Illinois Country*

Madson, John (1996) *Where the Sky Began, Land of the Tallgrass Prairie*