

# Glacier Creek Preserve

14810 State St., Bennington, NE



March 2022

Naturally occurring fires, ignited variously by lightning and Native Americans, played a major role in forming and maintaining historic prairie ecosystems. Over several thousand years, native plants and animals not only adapted to fire but became dependent on fire for their existence. With European settlement, however, came active fire suppression, increased land conversion to other uses, and the resulting isolation of remnant prairies. Today, without fire in a prairie ecosystem, comes woody plant encroachment, non-native plant invasions, loss of reproductive potential, and degradation, particularly of isolated prairie remnants, with the subsequent loss of the many plant and animal species that rely on prairie habitat.

## What is Prescribed Fire?

Prescribed fires are intentionally set fires intended to approximate historic fire occurrences. Prescribed fires are conducted under predetermined weather conditions with specific management objectives. At Glacier Creek Preserve, our management objective is to maintain the diversity of prairie flora and fauna in support of education, research, and community outreach. To meet this objective, the prairie is managed with a 3-year fire return interval in which a portion of the prairie is burned every third year thereby maintaining a patch-work of post-burn habitats. Landscape-level prescribed burns are conducted in early spring, generally during late April or early May depending on the year's weather conditions with small research plot burns in spring, summer and fall. To safely conduct a prescribed burn, a variety of specialized equipment, tools and techniques are used by experienced fire crews. All burns are conducted with the approval of the local fire department.

## Benefits of Prescribed Burning

The patchy nature of prescribed prairie burns is designed to maintain high biotic diversity with some species preferring recently burned prairie and others preferring habitat a few years post-burn. Evidence of our success with invertebrates is the persistence of a stable population of the regal fritillary (*Speyeria idalia*), a specialist butterfly of high quality prairie. There are numerous benefits of prescribed burns to prairie wildlife beyond just maintaining their habitat including:

- Reducing woody encroachment into the prairie.
- Reducing the abundance or spread of undesirable grasses and weeds.
- Stimulating seeding and new plant growth for animal nesting, food, and hiding.
- Maintaining flower abundance and diversity for pollinators and other insects.



### Beyond prairie biota - Benefits to human use include:

- Aesthetics of a prairie viewshed – prairie from horizon to horizon.
- A watershed-level prairie for research on biological and geomorphic process.
- An established tallgrass prairie restoration (est. 1970) available for research and for school groups at all educational levels interested in understanding more about our Tallgrass Prairie heritage.



## Excuse Our Smoke

We are well aware that one of the unavoidable byproducts of prescribed burning is smoke so we take all measures possible to minimize any potential smoke impacts on public health and safety. Prescribed burns are unlike wildfires in that they are planned when weather conditions are optimal for smoke dispersion, including the direction of spread. In addition, a prescribed burn is generally brief, starting in the morning and ending by late afternoon the same day.

For more information about Prescribed Burning at Glacier Creek Preserve contact us at:

Phone: 402-554-6300; E-mail: [unoglaciercreek@unomaha.edu](mailto:unoglaciercreek@unomaha.edu)

Visit the Preserve webpage at: <https://www.unomaha.edu/college-of-arts-and-sciences/nature-preserves/>