



Tallgrass Prairie National Preserve (TAPR) is comprised primarily of tallgrass prairie habitat. The tallgrass prairie ecosystem is fire-derived and fire-maintained. Fire that is highly variable in both frequency and seasonality is essential for the maintenance of a functioning prairie ecosystem. It is this variability that encourages the greatest expression of biological diversity. At TAPR, fire plays an important role in the cultural history as well, by maintaining the cultural landscape and viewshed and continuing the use of historic and contemporary use of fire in the Flint Hills ranching legacy.

### Draft Fire Management Plan Objectives:

- Protect human life, communities, and resources from the adverse effects of wildfire without compromising safety.
- Maintain and restore fire adapted ecosystems using appropriate tools and techniques in a manner that will provide sustainable, environmental and social benefits.
- Integrate knowledge generated through fire and natural resource research into fire management priorities, decisions and actions.
- Integrate fire as a natural process into preserve biotic communities to the fullest extent possible.
- Use prescribed fire as a tool to maintain the cultural landscapes.
- Build and promote organizational effectiveness by building program capacity, leadership, and effective management practices.
- Communicate and coordinate with TNC, interagency organizations, and other stakeholders to pursue common goals, programs and projects.

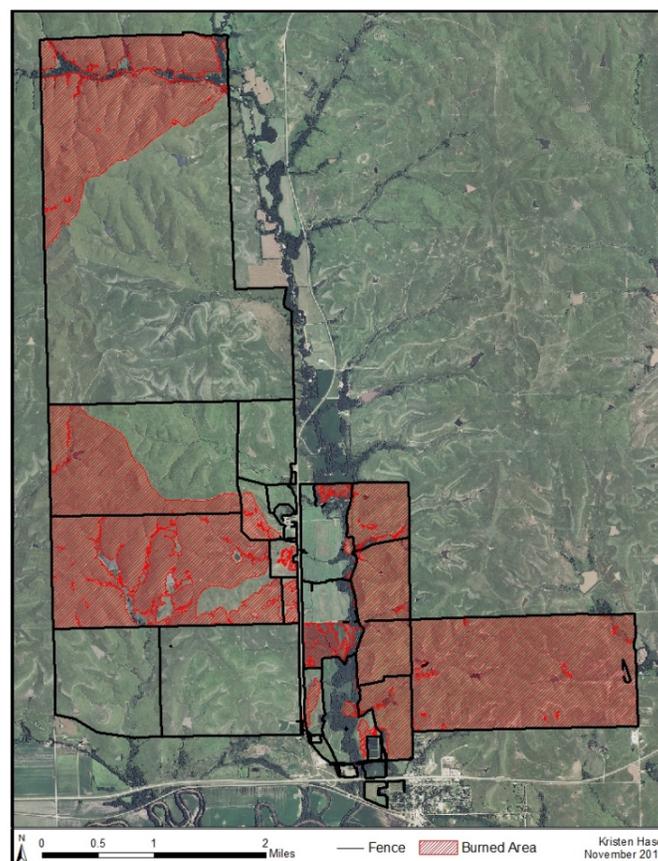


Figure 1. Tallgrass Prairie National Preserve 2011 burn perimeters.

### TAPR Remote Automated Weather Station (RAWS):

[http://raws.wrh.noaa.gov/cgi-bin/roman/meso\\_base.cgi?stn=TGSK1](http://raws.wrh.noaa.gov/cgi-bin/roman/meso_base.cgi?stn=TGSK1)

Table 1. Approximate number of acres burned per year at TAPR (1996-2011).

Year	Acres	Year	Acres	Year	Acres
1996	9970	2002	7892	2008	4791
1997	9970	2003	8584	2009	8114
1998	9970	2004	8654	2010	3629
1999	9970	2005	10040	2011	6608
2000	9970	2006	5122		
2001	8584	2007	3377		

# TAPR 2011 Fire Management Update

## Why Varied Fire Management?

- TAPR *General Management Plan (2000)*

“The preserve would be managed to maintain and enhance the tallgrass prairie within its boundaries. This would be achieved in part through the use of fire and historic and contemporary grazing regimes in differing combinations that vary over time and location. A Fire Management Plan would be developed with public participation. It would address such topics as program objectives, fuel management, burn frequency and prescriptions, natural prescribed fire, the monitoring and researching of fire effects, safety, and equipment use and personnel needs.”

“Prescribed fire applications would make use of roads, fences, stream courses, topography, and burn frequencies to create a varied landscape, or vegetative mosaic, to help maintain and enhance the tallgrass prairie, and to encourage and manage the wide variety of native plant and animal life associated with the prairie.”

## History of the Varied Burn Regime

2001 - Alternating two-year burn cycles in Red House and Crusher Hill pastures.

2006 - Patch Burn Grazing in Big Pasture and a variable fire regime in Windmill Pasture.



Figure 2. A night burn in the Big Pasture North unit at TAPR, April 6, 2011

## Reports

Leis, S and C. Kopek. 2011. Prescribed fire monitoring report: Tallgrass Prairie National Preserve (IQCS fire number: 194570, 194571). Natural Resource Data Series NPS/XXXX/NRDS—2011/XXX. National Park Service, Fort Collins, Colorado. (in draft)

	Burned	Unburned
Apr		
May		
Jun		
Jul		
Aug		
Sep		

Figure 3. Comparison of burned and unburned prairie via photopoint. Site is located in an ungrazed portion of the Southwind Nature Trail, TAPR. (Burned 2008, Unburned 2011). The site is ungrazed and weather conditions likely varied between the two years. The presence of unburned litter (previous year's growth) is apparent late into the growing season in 2011.

## Team Effort

The 2011 fire program included the use of TNC's Training Exchange, where firefighters seeking training opportunities come together for two weeks and complete prescribed fire operations on various units.

The NPS and USFWS in Kansas have a ServiceFirst Agreement that allows for and encourages the exchange of firefighters and equipment to complete prescribed and wildfire management activities on each agency's units.