

FIRE MANAGEMENT

Great Plains Fire Summit: Collaborating to Enhance Prescribed Burns in the South Central Plains



Conducting a Prescribed Burn/John Weir

INTRODUCTION

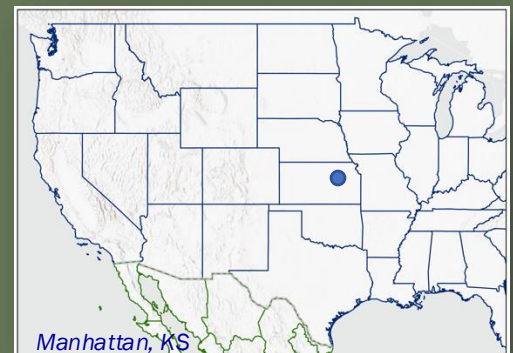
Fire is a natural part of the landscape in North America's South Central Plains (SCP), but fire suppression has altered the landscape, creating conditions for hotter, more damaging fires. Prescribed burns are a management technique used to reintroduce ecologically-appropriate fire to the region. However, there is little consistency in the policies and regulations that guide prescribed burns. In 2016, researchers and fire practitioners came together to share burn techniques and research findings. This Prescribed Fire Summit expanded collaboration for prescribed burns, increasing efforts to preserve SCP habitats and reduce the risk of severe wildfires.

KEY ISSUES ADDRESSED

Centuries of fire suppression allowed woody plants such as ashe juniper (*Juniperus ashei*) and eastern redcedar (*Juniperus virginiana*) to overtake native, fire-adapted species. These woody plants consume large amounts of water and contribute to the build-up of fuel loads, altering the region's natural fire pattern. Increased temperatures and precipitation variability further increase the risk for severe fires. Prescribed fire has become a more widely used management practice used to address these challenges, but the Prescribed Burn Associations (PBAs) that work to safely conduct burns must follow different rules and regulations across the region. There is a gap between prescribed fire research and on-the-ground practices, and fire practitioners often work in relative isolation within their local management areas. Greater collaboration is needed to identify and overcome common prescribed burn barriers.

PROJECT GOALS

- Analyze climate projections and prescribed fire guidelines to identify burn suitability.
- Host a Prescribed Fire Summit to facilitate interstate collaboration and consistent burn practices.
- Strengthen long-term partnerships to overcome prescribed fire barriers.



PROJECT HIGHLIGHTS

Climate Projections Inform Prescribed Burn Guidelines:

Fire professionals partnered with researchers from the University of Oklahoma to better understand changing fire patterns in the SCP, eventually leading to the first Prescribed Fire Summit. Researchers analyzed future climate projections and averaged burn day weather requirements from across the region, including temperature, humidity, and wind speed. This single set of guidelines increased the number of suitable burn days under future conditions.

Prescribed Fire Workshop Facilitates Knowledge Sharing:

The 2016 Prescribed Fire Summit brought together over 100 professionals and landowners from Nebraska, Kansas, Oklahoma, and Texas to discuss prescribed burn practices, concerns, and research. PBAs presented reports, and additional sessions included topics such as safety equipment grants, state fire policies, and invasive species management.

Successful Outcomes Lead to Ongoing Summits:

After 2016, the Prescribed Fire Summit became a recurring event. Hands-on activities such as field tours and practice burns are added at each conference. Attendees discuss research to improve burn techniques, such as expanding burns to summer months. Positive outcomes led the Summit to grow beyond its original intent.



Field Tour During the Prescribed Fire Summit/John Weir

LESSONS LEARNED

Prescribed Fire Summit organizers ensure conference costs, content, and location are accessible to a range of professionals. Summits are hosted bi-annually, and private landowners register with a reduced fee since they often cover these costs out of pocket. Survey feedback helps organizers identify relevant topics. The host location changes for each summit to expand attendance opportunities across the SCP region.

Fire Summits provide a collaborative space to discuss local and large-scale burn barriers. Each PBA faces unique challenges, but identifying similar issues across state lines or organization types helps participants learn from each others' experiences. Sharing stories of success and failures facilitates problem solving at all levels.

Prescribed Fire Summits help improve lines of communication between stakeholder groups. When fire practitioners and researchers identify public misconceptions about how fire affects safety, wildlife, or erosion, they can better address community concerns. Prescribed Fire Summit attendees also share how they build partnerships with county commissioners, emergency managers, and volunteer fire departments. These collaborations improve support for prescribed burns.

NEXT STEPS

- Host the next Summit in South Dakota to expand to more states.
- Identify and address more prescribed fire issues such as smoke management.
- Include more local leaders and agency partners to improve prescribed burn acceptance and policies.

PARTNERS

- See online for full list of partners
- For more information, contact John Weir:
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