

## Building Research Capacity to Enhance Tallgrass Prairie Management and Conservation in Kansas

### Problem/Issue Statement

Tallgrass prairies are the most productive rangelands in the world. In Kansas they support a grazing industry based on > 1 million cattle annually, constituting one of the largest sectors of state revenue. Effective management of these rangelands is critical for sustaining their productivity and economic viability and conserving the natural resources they provide. For 50 years, research at Kansas State University's Konza Prairie Biological Station (KPBS) has provided the knowledge necessary to manage this economically and ecologically valuable natural resource for current and future generations of Kansans. For example, research at KPBS benefits ranchers by developing recommendations for prescribed burning to maintain cattle performance while optimizing conservation goals, such as cover for grassland birds, plant biodiversity, and carbon storage. However, the future of tallgrass prairie rangelands is threatened by ongoing environmental and land-use changes. Enhancing research capacity at KPBS will allow us to address these challenges.

### Request Description

Fire and grazing are essential tools for rangeland management. Optimizing prescribed burning and management of grazers to meet production and conservation goals requires long-term research and replicated landscape fire and grazing treatments. This has been a hallmark of research at KPBS for 50 years. To continue these long-term fire studies and expand research on domestic (cattle) and native (bison) grazers, we request funding to (1) upgrade aging fire equipment (\$350,000) and (2) expand animal handling facilities (\$250,000) to accommodate reintroduction of elk - native grazers/browsers that likely play a critical role in maintaining high-quality rangelands with reduced woody plant cover.



### Request Goals and Expected Outcomes

KPBS is a world-class facility dedicated to effective rangeland management and grassland conservation in a changing world. Research at KPBS involves faculty from 5 Colleges and 14 Departments at KSU, 20 other universities, and 4 government agencies, and to date has generated > \$100M in competitive research grants. The ability to identify decadal patterns using large, replicated fire and grazing treatments underlies our success. Federal funding requested here will enable us to conduct new research on fire and grazing to improve rangeland management that will benefit Kansas ranchers, enhance natural resources in Kansas, and ensure future viability of our grassland heritage in Kansas.

### Appropriations Subcommittee

Commerce, Justice, Science, and Related Agencies

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies

### Request Type

Funding Request

Bill Language Request