

RESEARCH AND EXTENSION

• PROGRAM UPDATES AND HIGHLIGHTS •

PRESCRIBED BURNING PROGRAMS

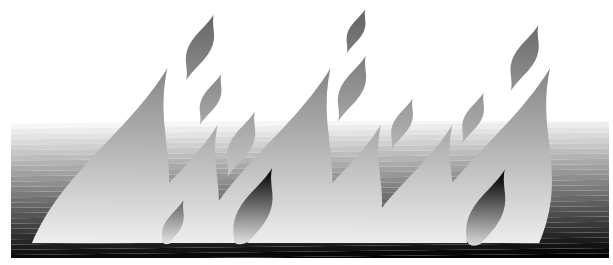
ISSUE

Fire has been integral to the development of Great Plains grasslands. Based on early records, natural fires, started by lightning, varied from only a few acres to some that covered thousands of acres and lasted weeks. In addition, the Plains Indians started fires to move game into certain areas.

To early settlers, fire was a feared enemy that destroyed everything in its path. As more settlers came, roads, fences, plowed fields, and overgrazing became barriers to wildfires, reducing their occurrence so that large wildfires became rare.

In Kansas, the same pattern occurred, except in the area known as the Flint Hills. Since settlement of the area, fire has been used as a management tool to rejuvenate and maintain the grasslands. Fire is essential to maintain the prairie ecosystem. Without it, the prairie would eventually become a forest.

Use of fire as a management tool has steadily spread westward across the state. Its use in western Kansas is limited primarily to controlling brush and weeds and improving grazing distribution.



BENEFITS OF PRESCRIBED BURNING

Studies by K-State Research and Extension have shown that fire can be a major management tool for native grasslands, native hay meadows, and in establishing new native grass stands. It can recycle nutrients tied up in old plant growth, stimulate tillering, control many woody plants and herbaceous weeds, improve poor grazing distribution, reduce wildfire hazards, improve wildlife habitat, maintain and improve native hay meadows, and increase livestock production in stocker operations. To gain these benefits, fire must be used under specific conditions and with proper timing. This is called "prescribed burning."

Research shows that stocker animals can gain 10 percent to 12 percent more on late-spring burned pastures in eastern Kansas. This response comes from higher quality forage that is available in the first half of the grazing season. These benefits occur only during the year of burning.

PARTICIPANT IMPACT

The Kansas prescribed burning program has reached over 3000 participants since its beginning in 1982. The program is the result of a cooperative effort between the Extension Agronomy Grazing Land Management Education Program and State Forestry. Of the almost 200 participants who attended the prescribed burning workshops in 1997 and 1998 and completed evaluations, 69 of them stated that they had never used prescribed burning or were afraid of fire. After the workshop, 59 indicated they would start the program. Only three indicated they would not use prescribed burning. Typical comments included: "Very detailed for first time and a lot of information on several types of burns. It changed my attitude about burning," and "Excellent workshop, informative, and educational." Participants also said they felt better educated on the effects and safety of prescribed burning. Also, producers in Iowa, Nebraska, and Missouri are utilizing K-State Research and Extension findings to manage prescribed burning more effectively and safely.

SUMMARY

Prescribed burning is a major management tool for rangeland. Properly used, it can be a cost-effective method for increasing the productivity of rangeland and controlling many undesirable plants. It also can reduce the hazards of wildfires and benefit domestic livestock and wildlife. K-State Research and Extension will continue to educate Kansas farmers, ranchers, and firemen on fire safety and benefits and will provide research on the environmental and economical impacts of prescribed burning.

CONTACTS

Paul D Ohlenbusch, Specialist, Range and Pasture Management
Department of Agronomy
2014 Throckmorton
Kansas State University
Manhattan, KS 66506-5504
(785) 532-5776
E-mail: pohlenbu@oz.oznet.ksu.edu

James W. Kunkel, Fire Manager
Kansas Forest Service
Harold G. Gallaher Forestry Building
2610 Claflin Rd.
Manhattan, KS 66502-2798
(785) 532-3300
E-mail: jkunkel@oz.oznet.ksu.edu

Brad Williams, Leader, Evaluation/Impact Assessment
K-State Research and Extension Administration
127 Umberger Hall
Manhattan, KS 66506-3400
(785) 532-6775
E-mail: bwilliam@oz.oznet.ksu.edu

For more information, please contact the K-State Research and Extension office in your county or district.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, Kansas

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