

Snapshots 2003

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Montana

Missouri River Breaks Prescribed Burning Effects on Browse Species

Central Montana Zone fire management staff members have been busy this spring implementing prescribed fires in the Lower Armells Creek drainage to compare the effects of prescribed burning on early dormant grasses, spring green-up, and fall burning on browse species in the Missouri River Breaks.

Central Montana Zone Fuels Technician, Jennifer Walker developed the project as part of the required curriculum to successfully complete the Technical Fire Management Program. When completed, the data gathered from this study will assist fire managers in determining the optimum time of year to implement prescribed fire in the Missouri River Breaks.

Through research, Walker has determined that fires within the last 30 years, whether natural or prescribed, have had mixed effects on browse species in this area. Some fires have increased browse sprouting and growth while others may have harmed shrub communities.



Central Montana Zone fire personnel applying fire to one of the spring (green-up) burn plots.



Vinita Shea, Lewistown Field Office Rangeland Management Specialist, assists with transect layout in one of the early spring (dormant) burn plots.

The Missouri River Breaks are fire adapted with rugged terrain of densely forested coulees, barren southerly slopes, ephemeral riparian areas, and shrub grassland plateaus. The forests are generally ponderosa pine but Douglas-fir sometimes dominates on north-facing slopes. There is an understory shrub component in most side-coulees that is important for big game browse. A seventy-year trend of increased pine regeneration has contributed to dense conifer growth in the forested areas, suppressing the understory browse species. If prescribed fires are located and implemented properly in the landscape, increased browse production may encourage dispersal of big game and lessen the negative impacts of herd concentrations.

Fire managers within the Central Montana Zone have learned from firsthand experience that



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South Dakota Field Office

Fort Meade Fuels Module Project Learning Tree

prescribed burning during green-up in the Missouri River Breaks generally produces effects that meet combined resource objectives. Implementation is easier, safer, and more cost effective due to high live fuel moistures in the surrounding grass and sagebrush areas. However, BLM wildlife biologists involved with the project argue that the response of browse species would improve if burning were implemented before bud break in late winter and early spring, or after dormancy in the fall.

The implementation and results of this important research project will further understanding of fire effects in the Missouri River Breaks ecosystem for natural resource specialists, and discover how fire can be used to achieve maximum benefit.

Contact: Steve Knox, Fuels Specialist, Central Montana Zone, (406) 538-1976

The Fort Meade Fuels Module participated in a two day "Walk in the Forest" Project Learning Tree Event in coordination with Project Learning Tree and the South Dakota Society of American Foresters. The participants for the two day event were the sixth grade classes from Sturgis and Spearfish Elementary schools. A total of 289 sixth graders were present for the event. The event was coordinated by South Dakota Project Learning Tree coordinator Dianne Miller using BLM grants for fire ecology education. Students rotated through five stations as part of the curriculum. These included tree insect identification and impacts, tree measuring techniques, forestry practices, and fire shelter use and information.

The Fort Meade Fuels Module was responsible for the fire shelter use and information station. Students were presented information on what a fire shelter is, what it's made of, and what it is used for. Crew members answered questions and demonstrated the proper steps and procedures for



This photo shows recent re-sprouting and browse of the chokecherry occurring in one of the early spring plots.



Students practice getting into fire shelters.



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getting into a fire shelter. Students got into groups of three to four and were allowed to practice getting into practice fire shelters with assistance from module members.

The fire shelters were a big hit not only for students but teachers as well. Several teachers participated in getting into the practice shelters. As one student told the module, “this was the best part of the whole day.”



South Dakota fuels module crew member helps a student get into a practice shelter.



Crew members provide an outdoor learning experience for students.

Getting Back to Basics

“Getting Back to the Basics” was the theme of the annual Northern Rockies-Great Basin Fire Prevention and Education Workshop held in Idaho Falls, Idaho, April 29 through May 1. Nearly 200 participants, representing both wildland and structure agencies from 14 states and Canada attended. The workshop included general and breakout sessions emphasizing education, wildland-urban interface, FireWise, mitigation grants, and interagency cooperation. Several sessions focused on the National Fire Plan concepts of mitigation, education, and prevention.

Speakers shared information and experiences, and participants had a chance to view products and services during the Product Display Fair. The three-day workshop culminated with a hearty luncheon and entertainment from Elizabeth Vidad, a Public Education Specialist with the Lake Havasu City, Arizona Fire Department. She gave encouragement and praise for fire mitigation, education, and prevention efforts.

Thirty-five of the workshop’s participants were

rural firefighters who received scholarships to enable them to attend. Their willingness to learn more about wildland fire is important, since rural firefighters have been identified as first-line contacts in the fight to mitigate the effects of fire in the wildland-urban interface.

In addition to attending sessions and establishing communication networks, participants were treated to the presentation of two national awards. Faye Christiansen, BLM, and Dean Burnham, USFS, were awarded Silver Smokey Bear Awards for their efforts in fire prevention. Faye, a Fire Prevention and Education Specialist for the BLM in Idaho Falls, currently manages a prevention and education program that services six million acres in southeast Idaho. Faye and crew have developed a multitude of prevention and education materials and have been active in cooperative prevention groups. Dean, also active in area prevention co-ops, serves as the Forest Fire Prevention Officer for the Bridger-Teton National Forest. Dean and Faye showcased some of their



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products and strategies in two separate sessions during the workshop.

The workshop was organized by the Northern Rockies Coordinating Group Prevention and Education Committee and was funded with National Fire Plan monies through the Montana BLM, Idaho BLM, Northern Region of USDA Forest Service, and Keep Montana Green.

Nevada

Trees thinned near Markleeville, California
During the fall and winter of 2002-2003, BLM Carson City, Nevada field office fire crews completed a fuels treatment project in a forested area southeast of Lake Tahoe.

The Markleeville Fuels Treatment Project targeted public land adjacent to Marklevillage, a subdivision of Markleeville, California, with the aim of reducing crown fire potential and enhancing fire suppression capabilities.

The treated area was adjacent to existing residences, as well as new residential development currently under construction. The Markleeville Fuels Treatment Project was located between residential areas and undeveloped, highly flammable wildlands.

The fire crews thinned the smaller trees, removed excess biomass and piled up the results. When conditions were suitable, the piles of excess biomass were burned. The idea was to clear up “ladder” fuels and open up the overstory canopy for the remaining larger, healthy trees.

Since 1990, the BLM has treated more than 700 acres of public land in Alpine County. Crews have used both prescribed fire and mechanical treatments in strategic locations to reduce



Dean Burnham (l), and Faye Christiansen (r), with their Smokey Bear Awards.

the severity of potential wildfires, as well as to improve timber stand health, vigor and resistance to fire, insects and disease.

Markleevillage is located near the mouth of a canyon. The surrounding National Forest lands have few roads, and include the Mokelumne Wilderness Area. Since land ownership patterns are mixed in the Markleevillage area, the BLM carried out the Project was conducted in conjunction with Forest Service fuels treatment projects. Local residents, Alpine County and the Forest Service supported the project from conception to completion.



Homes within the wildland-urban area at Markleeville, California.

The BLM Carson City Field Office manages roughly 19,000 acres of public land in Alpine County, California. The wooded, scenic area gets heavy recreational use. The towns of Markleeville and Woodfords are the two primary communities in the area, and the area’s moderate-density



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residential development is mostly located in the wildland urban interface. BLM management of these lands is aimed at enhancing and protecting private property, recreation development and natural resources.

Some of the characteristics that make public land in Alpine County a desirable place to visit also make it a difficult place to suppress wildland fire. The vegetation includes a diverse mix of Jeffrey pine, white fir, pinyon pine and mountain brush. Winds in the area can be intense. The wind, fuels, rugged terrain and limited access tend to increase the risk of large, intense wildfires when the weather turns hot and dry.

In recent years, increasing numbers of people have either made their homes in this area, or have come to the scenic woodlands to recreate. This increased human presence in the area has heightened the possibility of human-caused fire starts. Any fires that start in such an area pose a threat to human lives and property, and this threat increases as more and more residences are built adjacent to the wildlands.

Alpine County has a history of large, intense wildfires. In 1984 and 1985 19,000 acres burned. The 1986 and 1987 fire seasons included two 6,000-acre fires, with 24 residences destroyed near the community of Woodfords.

This increased risk of wildland fire damage to both private property and public land values is a great concern for area residents, as well as for the BLM, the Forest Service and Alpine County. In response to these concerns BLM has acted in cooperation with the USFS and Alpine County to complete fuels reduction projects in the county.



An area near the subdivision prior to treatment.



Threats were reduced after treatment.



Crews worked to hand thin overgrown areas.



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