

Partners for Prescribed Burning – The Story of Knotwell

BACKGROUND INFORMATION

The Knotwell Prescribed Burn takes its name from the Knotwell Lookout Tower that was at one time located within the unit. Boundaries are P Hwy on the north, Phelps County Road 7550 to the north and east, AA Hwy to the southwest, and the remainder consisting of hand constructed control line. This unit is just east of the Western Star Missouri State Natural Area, which is also a Forest Service prescribed burn unit.



The Kaintuck Hollow Area, or Mill Creek area, where the Knotwell Prescribed Burn unit is located, is culturally and historically unique. It has been home to human settlers since pre-history, and the land still holds remnants of this past today. Arrow points, glass and pottery remnants, old house places, and other human artifacts have been found in many locations. These historically significant remnants help us understand how people lived their daily lives over the past centuries.

Environmentally this area has a diversity of biological, geological, scenic and recreationally significant resources; a diversity that has been directly influenced over the years by natural disturbance and human caused activities, such as fire.

Due to the significance of this area, it is designated as a “Special Area” where protection of unusual environmental, recreational, cultural, or historical resources, and scientific or educational studies are primary purposes. The majority of this area is managed for restoration of biologically distinctive ecological areas while providing areas for the public to visit and enjoy.

HISTORY & PURPOSE



The oak-hickory and pine woodlands of the Knotwell Prescribed Burn unit, known by pre-historic peoples, looked different than what we see today. Trees were larger and spaced further apart, and the ground was covered with grasses, flowers, and vines. Occasional fires, started by lightning or native peoples, helped keep vegetation lush and wildlife populations thriving.



Today’s denser forests have more trees, which means less light to the ground.

This leads to fewer grasses and flowers, and more leaves produced to fall on the forest floor, which creates lots of fuel for wildfires. Current fuels are almost twice as much as the maximum amount desired. Research has shown that understory burns can be used to reduce fuel loading while leaving mature trees healthy and growing. So, one of the primary objectives of the Knotwell Prescribed Burn is to reduce those fuel accumulations to lessen the threat of a catastrophic wildland fire around homes and rural communities.



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Prescribed burning also helps increase plant numbers and amounts, which then provide increased food and cover for many kinds of wildlife. When completed, the burn is not expected to blacken the entire area; rather it will burn in a mosaic pattern as it varies in fuel consumption and heat intensity. Because the burn will be done in the spring, vegetation will quickly “green-up” after the burn and in a few weeks, you will see flowers and green plants over most of the area.

PARTNERS & PLANS



In 2016, the Forest Service is planning to conduct the Knotwell Prescribed Burn the week of February 22 or February 29 when weather and fuel conditions are right. Trained, experienced fire managers would conduct the burn according to a comprehensive prescribed burn plan prepared specifically for this area. A prescribed burn of this size normally takes a day or two to complete. Firefighters patrol the area for several days afterwards, until it is completely out and safe to leave.

The burn plan includes provisions to protect historic and cultural resources, as well as adjacent private lands and sensitive biological resources.

There are a total of 1,111 acres in the Knotwell Prescribed Burn unit, most of which is National Forest land. There are 69 acres of the Bohagian Conservation Area managed by the Missouri Department of Conservation and six private land tracts totaling 152 acres within the burn unit.

The Forest Service has cooperative agreements with these private landowners allowing the Forest Service to use pre-existing control features such as roads, creeks, and green pastures, on private lands to reduce the amount of constructed control lines. Potential benefits for private properties are overall reductions of hazardous fuel accumulations, along with an increase in the variety and quality of forage for wildlife and livestock. Constructed control lines will be established around six private primary residences and one isolated outbuilding, in order to exclude them from the burn unit.

Other prescribed burn units planned for the future in the Mill Creek/Kaintuck area include Western Star, Merrill Hollow, Kaintuck, and Elm Spring. Continued cooperation and communication between the Forest Service, MDC, private landowners, and adjacent residents are key to maintaining the unique and biologically significant features of this beautiful part of the Missouri Ozarks.



Prescribed Burn ignition



Prescribed Burn Smoke Column



Helicopter used for aerial ignition



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