

# 2017 Fire Media Guide



## ARKANSAS and OKLAHOMA INTER-AGENCY COORDINATION CENTER

### Ozark-St. Francis National Forests

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## Overview of Prescribed Fire

Prescribed fire is a tool used by natural resource managers, including foresters and biologists, to help improve the overall forest health for plants and animals. Prescribed fires are conducted by highly trained specialists and wildland firefighters who control the intensity of the fire and keep it within a defined area using fire lines that have been cleared of burnable material. These low intensity fires may leave some area inside the fire lines untouched, creating a mosaic of burned and unburned patches. Specially equipped helicopters are sometimes used to complete burns efficiently across the forests in addition to the efforts of wildland firefighters on the ground.

Safety and health are the top priorities during prescribed fire season. Many requirements must be met before a prescribed fire can take place. The day chosen includes a combination of the correct humidity, wind speed and direction, temperature, fuel moisture, and atmospheric conditions. Factoring in all these requirements limits the number of days in which a prescribed fire can take place. The Forest Service works with a variety of partners, including private, local, state, and federal entities to complete prescribed burns in a safe, economical, and efficient manner.

Wildlife thrives in areas recently treated with prescribed fire. These fires recycle nutrients into the soil, increasing the elements needed to promote healthy plant growth. It also clears shrubs, undergrowth, and leaf litter, opening the forest floor and making it easier for wildlife to move, as well as providing increased sunlight for other plants. Additionally, blackened ground will green up earlier in spring.

Flowering annuals and biennials are more visible and grow better in areas treated with fire, benefitting a variety of animals including butterflies and birds. An increased variety and number of small plants provides diverse forage for a wealth of animal species in areas recently burned. Grasses recover, grow rapidly and are more nutritious and digestible for animals, particularly deer. Turkey, quail, and doves also benefit from the flush of grasses and legumes following a burn.

People that enjoy the numerous recreation opportunities available on the forests, or those living nearby, also benefit from the improved forest conditions. Prescribed burns remove downed limbs and other debris from the forest floor, improving visibility and reducing obstacles.

The variety, quantity, and quality of the plants and animals that result from the treatments in these areas are noticeable not only to those enjoying activities in the forests, but also to people traveling through the forests or along one of the scenic drives and other highways.

Prescribed burns reduce the amount of heavy underbrush and leaf litter that could fuel a destructive wildfire. As a result, those living in the wildland-urban interface, where the forest meets development and neighborhoods, have increased protection from the threat of destructive wildfires.

In some cases, the Forest Service conducts larger scale burns. These larger prescribed burns are a cost-effective and efficient use of resources. By conducting large scale burns, fire managers can concentrate their efforts on one area for one day, as opposed to conducting several smaller fires in the same area over several weeks.

Up-to-date information on prescribed fire activity can be found at [www.fs.usda.gov/ouachita](http://www.fs.usda.gov/ouachita) or [www.fs.usda.gov/osfnf](http://www.fs.usda.gov/osfnf) or by calling 1-888-243-1042. Maps of projected burns are also available at the above listed web sites.

For more information, please call the Ouachita National Forest at 501-321-5202 or the Ozark-St. Francis National Forests Supervisor's Office at 479-964-7200.



## National Forests Management Plans' Impact on the Prescribed Burning Program

The Ouachita and Ozark-St. Francis National Forests Revised Land Management Plans provide guidance for managing more than 3 million acres of public forests in Arkansas and Oklahoma.

Both forest plans project an increase in the use of prescribed burning as an economical and beneficial tool to achieve ecosystem management and forest health objectives, including reducing the amount of hazardous fuels in the forest. The plans recommend the use of prescribed fire throughout the year, but the primary “season” of prescribed burns will continue to be January through March. However, both forests are conducting more burns annually.

In 2005, new procedures were adopted to lessen the impacts of smoke in communities. These include a more intensive public notification process, limits on the amount of burns that can be conducted at one time across the forests, as well as increased smoke screening efforts.

### Key Points

- Fire has a natural role in the forest ecosystems of the Ouachita and Ozark mountains.
- Fire has helped shape vegetation across the landscape for thousands of years – its presence is essential for the survival of many plants and animals found locally.
- Leaving nature alone has consequences, risks and trade-offs. Fuel accumulations (due to the absence of fire) can result in large destructive fires that negatively impact vegetation, soil and water.
- Prescribed fire is one tool that the Forest Service uses to meet ecosystem management goals.
- The Forest Service seeks to improve overall forest health and lessen the risk of high-intensity, destructive wildland fires by working to bring the forests closer to historic and natural ecological conditions.
- The Forest Service applies the fundamental principles of science and ecology to better understand and manage forest ecosystems.
- All components of the environment function as a dynamic, interdependent, and interrelated system. People are part of nature, and their actions have effects on the land.
- Public lands are unique, valuable resources for which the public has a shared responsibility in their care.
- Human development near or within forest boundaries has a long-lasting effect which brings risks, responsibilities, and obligations.
- The complexity of managing our public lands is compounded by the number of people living near or within forest boundaries and the increasing demands from people utilizing public lands.



## Reporting from the Fire Line

There is one overall rule for covering wildland fire stories: SAFETY FIRST! As a common-sense rule, nothing will be allowed to jeopardize the safety of the news media or those involved with suppression activities. A Public Affairs team member or another responsible forest official may be available to escort you to the fire line.

Please contact the Public Affairs Team at any of the following numbers: 501-321-5202, 479-964-7200, or 918-567-3724. Items to consider before going on the fire line include:

- **Location.** Access to wildland fires in Arkansas and Oklahoma can be easy or difficult depending on the location and availability of access roads. In some remote locations, access by non-emergency personnel may be limited to foot travel or four-wheel-drive. Wilderness locations do not allow any motorized access.
- **Personal Protective Equipment (PPE).** All firefighters and other personnel are required to wear personal protective equipment while out on the line. Today's personal protective equipment worn by firefighters is designed to ensure safety, and must be worn by all persons at or near the fire line. Sometimes PPE will be available for your use at the scene. This gear will include: a hard hat, Nomex fire-resistant pants and shirt, gloves, an emergency fire shelter, and instructions on how to use it. Coordinate your requests through Public Affairs. **You will need to provide your own leather boots with a fire-resistant sole (Vibram recommended). No sneakers, high-tops, or dress shoes will be allowed on the fire line.**

## Questions and Answers:

### What is the difference between a 'prescribed fire' and a 'wildfire?'

A wildfire is an unplanned or unwanted fire. Such a fire may be a threat to natural resources, structures, or people. Despite the cause, these fires are suppressed using strategies and tactics appropriate to the threat.

A prescribed fire is one that is started intentionally by qualified, trained personnel under controlled conditions. There are many reasons why land managers utilize prescribed fires, such as reducing the number of small diameter woody stems to give ground vegetation room and sunlight to grow and improve habitat for wildlife. Another reason may be to reduce the amount of fuel that would otherwise burn in a large, catastrophic wildfire.

Like a doctor's prescription, there are specific conditions that must be met before a prescribed fire is ignited, including favorable temperature, wind, and relative humidity. Other precautions also include a well-defined containment area that minimizes the possibility of the fire escaping. Even if most of these conditions are in place, the supervisors in charge of igniting the fire may stop the ignition for a variety of reasons: if they determine that weather conditions are too unstable; the lines are not sufficiently defined; not enough fire fighting equipment and people are available; there is a threat to public or firefighter safety; or for other unforeseen reasons. If these conditions are not in place, just as if the doctor's prescription is not followed carefully, the 'remedy' may prove just as harmful as the problem.

### How long does a prescribed fire last? How long does the smoke remain?

Most prescribed burns take only one day. On rare occasions, a large, landscape burn may continue into the night or the next day. The burn managers will ignite a fire in a manner that will promote smoke dispersal from the fire and ensure that all flames are completely extinguished at the end. Some smoke or haze may linger in the area of a prescribed burn for a day or two.

### Will trees die in the fire?

When fire is excluded for five or ten years, flammable undergrowth and debris accumulates, increasing the risk



of tree loss by wildfire. Trees are more likely to die in an uncontrolled wildfire than during a prescribed burn. If fire is excluded for several decades, native trees become ‘overstocked’ and changes the composition of the forest, reducing populations of herbaceous plants and animals who depend on fire-maintained habitats. On the other hand, when prescribed fire is applied to the forest every few years, some trees may be stunted and a few trees may be killed, but the entire system is maintained in its natural balance, making the forests more resilient.

### **How are wildfires put out?**

You need three components of combustion to keep a fire going: fuel, oxygen, and heat. The total fire suppression effort removes one or more of these. For example, fire lines remove vegetation – a fire’s access to fuel. The fire is sometimes smothered in dirt to remove its oxygen supply. Water and retardant may be used to cool flames and remove heat.

### **What’s the difference between “containment” of a fire and “controlling” a fire?**

A fire is not considered “controlled” until it is completely extinguished. Until then, firefighters work toward “containing” the fire. Here is one way to think of it: Think of a container – say, a mason jar. A fire is contained when it’s all “bottled in,” like in a container. The fire may still be burning, but if a distinct fire line is built around the entire perimeter, the fire will not cross or spot over outside the line, then the firefighters declare the fire “contained.” After containing the fire, the next step is to get it under control – that is, make sure it is dead out – no hot spots, no floating embers, nothing that will flare up again if a breeze develops.

### **How will an increase in the use of fire benefit ecosystem health?**

Fire has always been an integral part of many historic ecosystems. Fire is a unique ecological process because it simultaneously removes dead vegetation, recycles nutrients, and alters the structure of plant communities. The effects of fire can retard or accelerate the natural development of plant communities, alter species diversity, change nutrient flows, and interact with other physical, chemical, and biological systems.

### **How can an increase in the use of prescribed fire potentially lead to a decrease in the number, severity and cost of catastrophic wildfires?**

Prescribed fires reduce the intensity and magnitude of wildfires (unwanted wildland fires) by reducing the accumulation of flammable fuel (e.g., dead branches, brush, needles, and leaves) on the forest floor. Fire, used as a land management tool, “thins” out available fuels, reducing the chance that natural/ lightning-caused or human-caused wildfires will spread rapidly. With the periodic application of prescribed fire in the future, the threat of uncontrollable, catastrophic wildfires is reduced significantly, helping to protect firefighters and increasing public safety, and reduce property loss. Reducing the number of catastrophic wildfires through the increased use of prescribed fire can lower costs to taxpayers.

### **What is the relationship between fire and air quality?**

Wildfires can pose significant safety threats to firefighters and the general public, as well as destroy property and natural and/or cultural resources. The intense or extended periods of smoke associated with wildfires can also cause serious health effects and significantly decrease visibility.

Years of aggressive fire suppression practices resulted in forests and rangelands that have heavy accumulations of fuel that can lead to catastrophic wildfires.

Smoke management techniques are used during prescribed fires to minimize the impacts from smoke on public health and the environment. These techniques include scheduling burns during favorable weather conditions that allow for good smoke dispersal and limiting the amount of land burned at one time. Each prescribed burn site will have unique characteristics, but in general, smoke impacts can be greatly minimized by burning during weather conditions that provide optimal humidity levels and wind conditions for the type of materials being burned, in addition to limiting the amount of materials and acreage burned at one time.



## Fire Fighting Tools

**Pulaski** - A combination tool, ax and mattock, that enables firefighters to cut trees and limbs with the ax side and to dig and scrape with the mattock side.

**Council Rake** - The council rake is common in the Southern and Eastern United States, it resembles a garden rake that has had its tines replaced with metal shark teeth. It is a scraping tool used to cut through thick layers of leaf or needle litter while making a fire line. The sharp teeth also make it useful for cutting vines.

**McLeod** - A combination heavy duty rake and hoe tool used to cut through matted litter and duff and clearing loose surface materials.

**Drip Torch** - Firefighters use this device for igniting backfires or burnouts.

**Helicopters** – Supports firefighters on the ground by dropping water, foam or retardant on flaming trees, brush and even structures to cool hot spots and prevent a fire from spreading.

**Airtankers** - Large planes equipped with tanks for transporting and dropping fire retardant or water. Their capability ranges from 2,000 gallons to 3,000 gallons. Airtankers drop their load in a long string, creating a line of retardant. The purpose of the retardant is to slow the fire down in order to give ground support forces the opportunity to build fire lines. A pink dye is added to give the pilot an idea of where the drop landed.

**Single Engine Air Tanker (SEAT)** - Small air tankers capable of delivering up to 600 gallons of retardant or water.

**Lead Planes** - These planes are used to “lead” the airtankers to and through their retardant drops and are also used for aerial reconnaissance of fire areas.

## Key Definitions

**Backfire (or Backburn)** -A fire set along the inner edge of a control line to consume the fuel in the path of a wildland fire, and/or to change the direction of force on the fire’s “convection column.”

**Blow-up** - A sudden increase in fire activity or rate of spread sufficient to preclude direct control or to upset existing control plans.

**Burning Out** - Setting backfires on a small scale and with closer control, in order to consume patches of unburned fuel and aid in the construction of control lines.

**Contain a Fire** - To restrict a fire within determined boundaries established either prior to, or during, a fire.

**Control a Fire** - To take suppression action as needed, which can be reasonably expected to check a fires spread under prevailing conditions.

**Crown Fire** - A fire that burns in tree tops (going from tree top to tree top) and which burns all or a large part of



the upper branches and foliage of the trees.

**Engine** - Any ground vehicle that provides specified levels of water pumping capabilities.

**Escaped Fire** - A fire that has exceeded initial attack capabilities and is spreading.

**Fire Line** - A break in a fire's fuel source, used to stop the fire's spread.

**Fire Shelter** - A personal, protection item carried by firefighters which, when deployed, unfolds to form a tent-like shelter of heat reflective materials.

**Fuel Type** - Refers to the type of vegetation in which a fire is burning. The fuel type is used in predicting fire behavior and determining a fire's effects.

**Hot Shot Crew** - Highly trained, skilled, and experienced crews comprised of firefighters. The crew members serve in all phases of wildland firefighting: building fire lines, burning out, setting backfires, and mopping up.

**Initial Attack** - The control efforts undertaken by firefighters who are first to arrive at an incident.

**Slop Over** - A fire which has breached the fire line.

**Smoke Screening** - An effort to look down wind of a prescribed fire to identify and avoid smoke-sensitive areas (hospitals, schools, etc.).

**Spot Fire** - A fire that occurs outside the perimeter of the main fire and can be caused by flying sparks or embers.

**Strike Team** - Specified combinations of the same kind, and type of, resources, with common communications and a leader.

**Torching** - A tree that suddenly erupts into flames from the base to the top.

**Wildfire** - Any fire occurring on wildland, except for a fire under prescription.

**Wildland** - An area in which development is essentially nonexistent, except for roads, railroads, power lines, and similar transportation or utility structures.



## Fire Information Web Sites

[www.fs.usda.gov/ouachita](http://www.fs.usda.gov/ouachita)

[www.fs.usda.gov/osfnf](http://www.fs.usda.gov/osfnf)

[www.forestry.state.ar.us/](http://www.forestry.state.ar.us/)

<http://www.forestry.ok.gov/>

<http://www.nifc.gov/>

<http://www.arkansasfirewise.com/>

