

A firefighter in full yellow protective gear, including a helmet and jacket, is seen from the side, actively managing a prescribed fire in a field of tall grass and brush. The fire is burning brightly, with orange and yellow flames rising from the ground. The background is slightly hazy, suggesting a controlled burn environment.

# Legal Environment for forestry Prescribed Burning IN MISSISSIPPI

**FOREST AND WILDLIFE RESEARCH CENTER**

Mississippi State University

Research Bulletin

The Forest and Wildlife Research Center at Mississippi State University was established by the Mississippi Legislature with the passage of the Renewable Natural Resources Research Act of 1994. The mission of the Center is to conduct research and technical assistance programs relevant to the efficient management and utilization of the forest, wildlife, and fisheries of the state and region, and the protection and enhancement of the natural environment associated with these resources. FWRC scientists conduct research in laboratories and forests administered by the University and cooperating agencies and industries throughout the country. Research results are made available to potential users through the University's educational program and through Center publications such as this, which are directed as appropriate to forest landowners and managers, manufacturers and users of forest products, leaders of government and industry, the scientific community, and the general public. Dr. George M. Hopper is director of the Forest and Wildlife Research Center.

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**FOREST AND WILDLIFE RESEARCH CENTER**

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# **Legal Environment for Forestry Prescribed Burning in Mississippi**

by

Changyou Sun and Andrew J. Londo

Forest and Wildlife Research Center  
Mississippi State University

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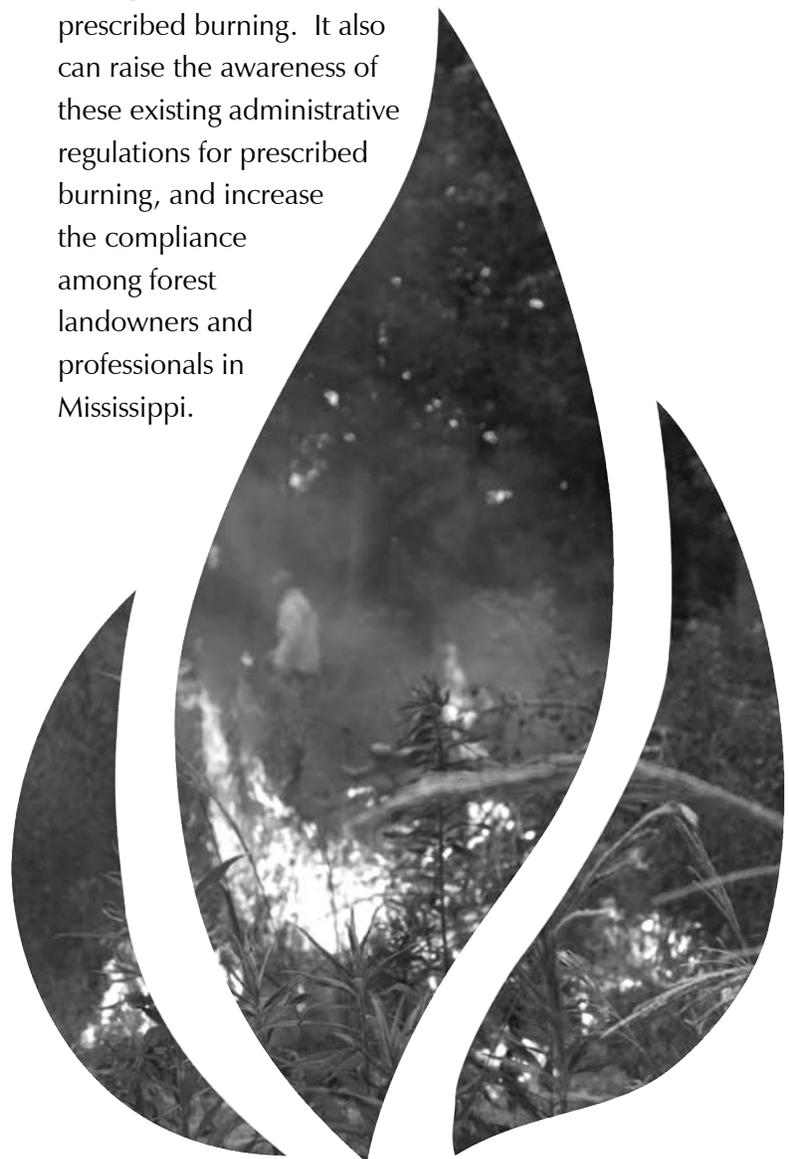
# INTRODUCTION

For the 19.8 million acres of forest land in Mississippi, prescribed burning has been one of the major management tools available to forest landowners. Benefits associated with prescribed burning have long been recognized in the forestry community. These include vegetation control, wildlife habitat improvement, site preparation for regeneration, disease control, fuel reduction, and wildfire prevention (McNabb 2001). Yet, even with these advantages, the use of prescribed burning has become more challenging in recent years. To a large degree, this is due to the increasing concerns of landowners over liability exposure and legal consequences from smoke and escaped fires.

The legal environment of prescribed burning on forest land is composed of various laws. In general, laws come from four sources: common law, statutory law, administrative law, and Constitutional law (Eshee et al. 2005). Common law is rooted in the common practices of people. As a body of law derived from judicial decisions, common law also is referred to as judge-made law. Statutes are created by legislative bodies (i.e., the U.S. Congress and state legislatures). While common law has greater flexibility in dealing with specific factual circumstances, statutory law usually provide more specific treatments for a given issue. Administrative law refers to the vast body of law promulgated by various administrative agencies which operate much of our government on a daily basis. Constitutions are the basis of the government framework and the cornerstone of the legal system. For prescribed burning, common law has been the dominant source of law for many years while Constitutional law has rarely been the center. Statutory laws and associated administrative regulations have become gradually more important for prescribed burning on forest land in the South since 1990.

The purpose of this publication is to review relevant laws related to the use of prescribed burning on forest land in Mississippi. These laws are summarized under three categories: common law,

statutory law, and administrative law. Several court cases are reviewed to elaborate the legal principles that have been required by the courts in Mississippi. This is followed by the examination of statutory laws related to prescribed burning in Mississippi. Emphasis will be placed on the Mississippi Prescribed Burning Act of 1992, a statutory law specifically enacted for prescribed fire. Administrative laws and regulations related to this Act have been promulgated by the Mississippi Forestry Commission and they also will be analyzed. At the end, useful linkages related to the legal environment of prescribed burning are presented. This publication will be helpful for forest landowners and managers in Mississippi to understand the legal environment of prescribed burning. It also can raise the awareness of these existing administrative regulations for prescribed burning, and increase the compliance among forest landowners and professionals in Mississippi.



# COMMON LAW FOR PRESCRIBED BURNING IN MISSISSIPPI

Two aspects of common law are related to prescribed burning on forest land—property law and tort law. Property law deals with the right of owners to use their land as they see fit in relationship to others in society (Eshee et al. 2005). For forest landowners, it has been long recognized and rooted in common law that they have the right to set fire intentionally on their land for a legitimate management purpose, such as burning brush. In contrast, tort law pertains to civil harms occurring to people or properties, and it covers all civil wrongdoing except breach of contract. Prescribed fire may spread onto someone's land, and cause personal injuries or property damages, or both. Considering property law and tort law together for forest landowners, the balance between property rights and tort protection specifies the way of using prescribed burning on forest land.

When prescribed burning results in personal injury or property loss, tort law can provide the remedy to resolve the dispute between the injurer (i.e., landowner or burner) and the victim. Among the various tort rules, discussions of the common law for prescribed burning usually concentrate on negligence tort rules. Several cases in Mississippi have elaborated these negligence rules well. In addition, forest landowners may also be held vicariously liable for the negligent acts of their employees or independent contractors. Vicarious liability and the relevant cases are also examined below.

## ***Negligence Tort Rules and Mississippi Negligence Cases***

Negligence rules permit a defense that the accident occurred despite the fact that the defendant satisfied all applicable standards of care. Thus, they may allow the defendant to reduce or even avoid liability (Eshee et al. 2005). Proof of negligence requires four elements: duty, breach of a duty (i.e., fault), causation, and loss. Duty is the obligation that each person in society owes others to act in

a manner which is not negligent toward them. Different activities and situations dictate special duties. When the duty has been established, the next determination is whether or not the defendant has breached the duty. Should the conduct of a person not achieve the standard of care demanded by society and decided by the court, then the duty has been breached. Furthermore, there should be a close causal connection between the breach of duty by the defendant and the loss sustained by the victim. Finally, the plaintiff must prove that actual loss has been suffered.

The number of Mississippi cases involving prescribed burning is small. However, the few cases that have been decided offer good guidance (Eshee and Savelle 1993). In the case of *Wofford v. Johnson* (1964), Holliday, an employee of the defendant Johnson, pushed up several piles of brush with a bulldozer and set one pile on fire at about 3:00 p.m. on March 23, 1964. The pile was approximately thirty feet in diameter and about one hundred and fifty-two feet from the woods on Johnson's land. The burning pile and woods were separated by a stretch of green rye grass. The fire was not checked that night. The next morning Holliday observed Johnson's woods burning but made no effort to control the fire. Johnson was informed of the fire but made no effort to control it. The fire spread to Wofford's property where it burned over six hundred and eighty-two acres causing extensive damage. The weather conditions for that time of the year were very dry.

The court held that when a property owner or his employees set a fire on his own property for a lawful purpose, he would not be liable for damage caused by the spread of the fire to the property of another unless he was negligent in starting or controlling the fire. The court found that the measure of diligence required was ordinary care. Ordinary care was defined as such care, caution and diligence as a prudent and reasonable person would exercise under

the circumstances to prevent damage to others. Such care must be used in setting the fire and in keeping it or preventing its spread. The duty of ordinary care should be commensurate with the danger reasonably to be anticipated and dependent on the circumstances in the particular case. Given these standards and facts, the court found that the landowner in this case was negligent.

In *Robinson v. Turfit* (1941), the court stated that in determining what action would be negligence, the court held that many factors had to be considered. Some of these factors included: conditions and circumstances surrounding the guarding of fire to prevent its spread, the number and magnitude of fires, the condition of the soil and the amount of litter, the state of the weather, the direction and force of the wind, and the relative situation and exposure of the property of the plaintiff. Other factors to consider would be the type of fuel in the fire, the number of fire fighters available, the experience and level of training of the fire fighters, and the type and amount of equipment available for controlling the fire.

### ***Vicarious Liability of Landowners for Torts Committed by Burners as Employees***

Forest landowners must be aware that the acts of their employees or agents may subject them to vicarious liability. Vicarious liability is the liability of one individual, without any wrongful conduct on his part, for the wrong committed by another (Eshee et al. 2005).

Under the doctrine of *Respondeat Superior*, an employer is liable for the negligent acts of his employee, if such negligent acts occurred while the employee was acting within the scope of his employment (Eshee and Savelle 1993, Eshee et al. 2005). An employee is a person employed to render services to an employer. The employer retains the right to control the employee in the method and way of rendering services. The essential feature of the employer/employee relationship is that the employer has the right to control the physical activities of the employee, as well as the manner of accomplishment of the employment duties. Scope of employment means the work the employee is engaged in is the

type he was hired to perform during the working hours. Thus, a forest landowner, whose agents or employees are negligent in conducting prescribed burning, may be held vicariously liable for the negligent acts of his employees, if such agents or employees were acting within the scope of their employment when the negligence occurred.

*Gloster Lumber Company v. Wilkerson* (1918) illustrated the doctrine of *Respondeat Superior* and its application to prescribed burning well. In this case, the employees of Gloster Lumber Company were burning a tract of land. The fire crossed over onto the land of the plaintiff and burned over fifty acres. The employees of Gloster Lumber Company were found negligent in their control of the fire, and as a consequence the employer, Gloster Lumber Company, was held vicariously liable for the damages caused by their negligence. The negligent employees were also held liable (Eshee and Savelle 1993).

In *Gulf Oil Corp. v. Turner* (1970), the burner contracted as an independent contractor with the landowner Gulf Oil Corp. to burn 100 acres of woodland (See **Exhibit I**). However, during the burning, the foreman from Gulf Oil Corp. controlled the burner in setting the fire. As a result, the court refused to admit the contract and held that the burner was not independent of Gulf. The burner as the employee of Gulf was not responsible for the burning which produced smoke that covered a portion of the highway where an automobile accident ultimately occurred. Gulf as the landowner and employer was responsible for all the negligence and damages from the fire.

It should be noted that an employer cannot protect himself from liability by imposing safety rules on his employees or by giving his employees specific and detailed orders to proceed with their work in a careful manner (Eshee et al. 2005). The doctrine of *Respondeat Superior* goes beyond negligent torts. The employer may be held liable for intentional torts of the employee when the intentional torts are reasonably connected with the employment and are within the scope of employment.

### ***Vicarious Liability of Landowners for Torts Committed by Burners as Independent Contractors***

An independent contractor is different from an employee in several aspects. Although the independent contractor works for the employer, the employer has no right to control the contractor in the method, way, or mode of accomplishing and completing the work. The independent contractor contracts with the employer regarding the results to be accomplished—not regarding the manner or procedure for accomplishing and completing the work. The independent contractor is usually paid a negotiated, lump sum for the entire job, while the employee is normally paid a wage. Although the completed job must meet certain specifications, the method of performance is entirely within the discretion of the contractor. The independent contractor usually possesses a higher degree of skill or expertise than the normal employee. The

independent contractor usually owns his own business and uses his own tools, while the employee generally depends on the employer to furnish these items.

The purpose for distinguishing between the employee and the independent contractor is because the doctrine of Respondeat Superior usually applies to the employee but not the independent contractor. The employer will generally not be held liable for negligent wrongs of an independent contractor unless ultra-hazardous activities are conducted. The Supreme Court of Florida in *Madison v. Midyette* (1989) held prescribed burning to be an inherently dangerous activity and ruled that the employer (i.e., the forest landowner in the case) was vicariously liable for a burning contractor's negligence. The court said that setting a fire clearly is a dangerous activity because it is inherently dangerous. To date, Mississippi courts have not defined prescribed burning as an ultra-hazardous or inherently dangerous activity.

## **STATUTORY LAW FOR PRESCRIBED BURNING IN MISSISSIPPI**

Several statutes in Mississippi are related to the intentional use of fire for forest land management. While the Mississippi Prescribed Burning Act of 1992 was specifically enacted for prescribed burning on forest land, two other statutes are also related, as explained below.

Two existing statutes in Mississippi are closely

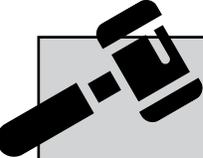
related to prescribed burning on forest land. One deals with arson and willfully or negligently setting fires to woods, defined in Section 97-17-13 of Mississippi Code Annotated (1972 as amended). The other is about trespass by firing woods, defined in Section 95-5-25 of Mississippi Code Annotated (1972 as amended). The two statutes are listed as follows.



### ***Section 97-17-13 Arson; willfully or negligently firing woods, marsh, meadow, etc.***

“If any person willfully, maliciously, and feloniously sets on fire any woods, meadow, marsh, field or prairie, not his own, he shall be guilty of a felony and shall, upon conviction, be sentenced to the state penitentiary for not more than two (2) years nor less than one year, or fined not less than two hundred dollars (\$200.00) nor more than one thousand dollars (\$1,000.00), or both, in the discretion of the court.

Provided, however, if any person recklessly or with gross negligence causes fire to be communicated to any woods, meadow, marsh, field or prairie, not his own, he shall be guilty of a misdemeanor and shall, on conviction, be fined not less than twenty dollars (\$20.00) nor more than five hundred dollars (\$500.00), or imprisoned in the county jail not more than three (3) months, or both, in the discretion of the court.”



### **Section 95-5-25 By firing woods**

“If any person shall set on fire any lands of another, or shall wantonly, negligently, or carelessly allow any fire to get into the lands of another, he shall be liable to the person injured thereby, not only for the injury to or destruction of buildings, fences, and the like, but for the burning and injury of trees, timber, and grass, and damage to the range as well; and shall moreover be liable to a penalty of one hundred and fifty dollars in favor of the owner.”

These statutes are closely related to intentional torts or gross negligence. Intentional torts like arson are similar to crimes in many aspects. Gross negligence is the lack of even slight care. The conduct of the individual falls far below the conduct of the reasonable prudent person associated with simple negligence. In other words, gross negligence

is the intentional failure to perform a manifest duty in reckless disregard of the consequences affecting the life, health or property of another. One found grossly negligent in conducting his prescribed burning activities may be held liable for damages caused by his gross negligence. That person would also be subject to criminal prosecution for the same acts of gross negligence.

Both of these statutes have their origination from codes enacted over 100 years ago. The primary purposes of these statutes are to protect forests and private property. In contrast, prescribed burning on forest land is intentional use of fires with forest land management as the legitimate purpose. Thus, the two statutes may not apply to prescribed burning on forest land in many situations. Nevertheless, they are related to the use of fires on forest land and often declared in courts by plaintiffs.

### **Mississippi Prescribed Burning Act of 1992**

Because of the constraint brought by existing statutes and the demand of prescribed burning as a management tool on forest land, a number of states in the United States have passed Prescribed Burning Acts since 1990 (Sun 2006). The Mississippi legislature did so during the 1992 Session and the law has been effective since March 1, 1993. As shown in **Exhibit II**, this Act was entitled the “Mississippi Prescribed Burning Act” (Section 49-19-301 to 307 of Mississippi Code Annotated, 1972 as amended). It codifies prescribed burning as a landowner property right. It recognizes prescribed fire for its benefits to society, the environment, and the economy of Mississippi. In addition, it outlines the steps that the landowner and practitioner must follow to minimize their liability when using prescribed burning for forest management.

The Mississippi Prescribed Burning Act has been divided into four sections (i.e., 301, 303, 305, and 307). Each section addresses unique policy and legal issues.

#### **SECTION ONE, § 49-19-301 SHORT TITLE**

it provides the citation of the new law as the “Mississippi Prescribed Burning Act.”

#### **SECTION TWO, § 49-19-303 LEGISLATIVE FINDINGS**

it recognizes prescribed burning as a landowner property right. This is a milestone, since prescribed burning previously had no such designation. The legislature has legally and morally placed its stamp of approval on prescribed burning activities in Mississippi.

Furthermore, prescribed burning has been acknowledged for the benefits to society it achieves, namely, the safety of the public, the environment, and the economy of the state. The statute verifies the importance of prescribed burning activities for the reduction of naturally occurring vegetative fuels. These fuels could lead to catastrophic wildfires endangering life and property if they are allowed to accumulate unchecked. The legislature also recognizes the importance of biological diversity in Mississippi’s ecosystems. Ecological integrity is stressed with prescribed burning being essential to the perpetuation, restoration, and management

of many plant and animal communities. Prescribed burning is viewed as important to prepare forest lands for reforestation, removal of undesirable competing vegetation, promoting nutrient cycling, and control or elimination of forest pathogens.

As the population of the state grows and more pressure is placed on natural resources, liability issues may inhibit the use of prescribed burning. This act forthrightly states that its purpose is to authorize and promote the continued use of prescribed burning. Not only does this act authorize prescribed burning, but it also promotes its future use for ecological, silvicultural, and wildlife management purposes.

### **SECTION THREE, § 49-19-305 DEFINITIONS**

it presents an easily understood definition of “prescribed burning” and clarifies the type of activities within which prescribed burning falls. It also defines two additional terms: certified prescribed burn manager and prescription. To ensure maximum benefits and protection of society, proper training for those who use prescribed burning is necessary. These definitions clarify the concepts required for proper training for those who use prescribed burning.

### **SECTION FOUR, § 49-19-307 LIABILITY FOR PRESCRIBED BURNS**

it sets forth negligence as the measuring stick for liability.

**Section 4(1)** vigorously establishes simple negligence as a basis for liability in prescribed burning activities in Mississippi. It reaffirms that the standard for liability in Mississippi for prescribed burning activities is simple negligence. In a litigation case, the burden of proving negligence on part of forest landowners or prescribed burners rests with the plaintiff to prove the case by the preponderance of the evidence.

**Section 4(2)** clearly dictates four requirements in conducting prescribed fire. These four requirements are mandatory and must be closely followed by the prescribed burner. Briefly, these four requirements are: have at least one certified prescribed burn manager on site, prepare and notarize a written prescription plan before burning, obtain a burning permit from the Mississippi Forestry Commission, and be considered in the public interest. Failure to follow these requirements invites a lawsuit based on negligence per se. Negligence per se is conduct which may be declared and treated as negligent conduct without any further argument or proof regarding the surrounding circumstances because there is a violation of a statute. One must be very careful to follow the requirements of the statute. Failure to do so will make a lawsuit more difficult to defend.

**Section 4(3)** specifies that the Mississippi Forestry Commission shall have the authority to promulgate rules related to this Act. This allows the Commission to make and implement these administrative laws and regulations related to prescribed burning on forest land in Mississippi.

**Section 4(4)** specifically states that nothing in it shall be construed to limit the civil liability of Section 95-5-25 and Section 97-17-13 of Mississippi Code Annotated.

# ADMINISTRATIVE LAW FOR PRESCRIBED BURNING IN MISSISSIPPI

Under the Mississippi Prescribed Burning Act of 1992, the Mississippi Forestry Commission has the authority to regulate burning activities on forest land in Mississippi. These regulations for prescribed burning are administrative law in nature so they are mandatory and also carry the force of law behind them. The current administrative regulations can be divided into three categories: the certification of prescribed burn managers, the guidelines for a prescribed burn prescription, and the issue of a burning permit.

## *Certification of Prescribed Burn Managers in Mississippi*

The Mississippi Forestry Commission has established the criteria that must be met for individuals desiring to become a “Certified prescribed burn manager.” At present, there are three approaches to attain the status of certified prescribed burn manager in Mississippi. Unlike other southern states, the Mississippi Prescribed Burning Act does not require any continuing education to maintain certification. The details of these three approaches are as follows:

**Approach A:** An individual must successfully complete all components of the Prescribed Burning Short Course sponsored by the Department of Forestry at Mississippi State University. The short course typically consists of a multi-day program, including elements from the National Interagency Fire Center (NIFC) S190 and S290 training programs. Individuals are required to write prescribed burning plans for a number of properties, and must successfully pass the short course final examination with a grade of 80 or better. The short course is normally conducted twice a year (spring/fall) in conjunction with the Division of Academic Outreach and Continuing Education at Mississippi State University. Instructors for the course come from the Mississippi Forestry Commission, along with the USDA Forest Service, Mississippi State University, and other organizations.

**Approach B:** An individual certified in another state may qualify for certification in Mississippi. The individual must contact the Mississippi Forestry Commission and provide proof of their certification at that time. The decision on whether Mississippi certification is extended to the individual is up to the discretion of the Mississippi Forestry Commission. All materials for certification by means other than the Prescribed Burning Short Course at Mississippi State University should be submitted to the Chief, Forest Protection Division of the Mississippi Forestry Commission.

**Approach C:** An agreement has been made with the Mississippi Forestry Commission and the Department of Forestry at Mississippi State University to allow students enrolled in FO 3202 Forest Fire to become certified prescribed burn managers. This course is offered each spring semester. In order to become certified, the following criteria must be met: (1) Students must pass the final exam in the NIFC S290 training program; (2) Information on the Mississippi Voluntary Smoke Management Screening System must be presented; (3) Students must pass the final exam in the Prescribed Burning Short Course with a grade of 80 or better; and (4) Students must pass the course with an overall grade of at least 70.

## ***Guidelines for Preparing a Prescribed Burn Prescription Plan***

Under the authority of the Mississippi Prescribed Burning Act of 1992, the Mississippi Forestry Commission has promulgated guidelines for the

prescribed burn prescription. The minimum requirements for information that a prescribed burn prescription should contain are as follows (See a sample plan in **Exhibit III** adapted from Londo et al. 2005):

### **Requirement 1:**

Legal Description of Property – The complete legal description of the property needs to be on the form. This includes the 40, section, township, range, and names of county and state.

### **Requirement 2:**

Name of Owner – The name and address of the property owner as well as the name of the plan preparer need to be included. Mississippi requires that a burn plan be notarized at least one day prior to the day of the burn. The notary's signature and number needs to be placed on the burn plan. In addition, the burn permit number assigned by the Mississippi Forestry Commission on the day of the burn should be documented on the burn plan as well. While not technically necessary, it would provide evidence in the field that a burning permit was obtained in the event that proof of a permit was requested by a law enforcement agency.

### **Requirement 3:**

Stand Description – Stand characteristics need to be described. This includes overstory and understory description. Fuels need to be described as well. Fuels are typically considered to be those on the soil surface. Loadings and models can be determined by using the fuel model and loading methods as described in National Wildfire Coordinating Group (1981). In addition, the topography of the site needs to be taken in to account, as it can have significant effects on fire behavior, microclimatic conditions and fuel loading. It is important to note what soils are present on the site. This is especially true if there are organic soils present. Special precautions should be taken to keep fire away from organic soils.

### **Requirement 4:**

Purpose of the Burn – There are many reasons for conducting a prescribed burn. These reasons include timber management, wildlife habitat management, hazardous fuel reduction, etc.

### **Requirement 5:**

Pre-Burn Information

(5a). Maps:

You need at least two maps. A large-scale area map needs to have the burn area highlighted, along with evidence of smoke management screening. A site-specific map focuses on the area being burned with burning methods and escape routes marked.

(5b). Fire Lanes:

On the site specific map, it is recommended that the corners of the area to be burned are labeled, usually with capitol letters (see attached map as an example). When installing fire lanes, label the fire lane placement based on the letters. This is done for simplicity and safety. Everyone can see where the fire lanes are, based on the map. If the crews are using radios for

communication, it is easy to let everyone know where they are, or where the jump in the fire lane has occurred, etc. Interior fire lanes may be needed. These can be installed and labeled in the same way as those on the exterior. In addition, it is also useful to put in the burn plan any natural, or other man-made fire breaks present. These can include streams, ponds, roads, skid trails, etc.

(5c). Acres to be burned, crew size, equipment needed:

It is important to document how many acres are to be burned, as well as the crew size and equipment needed. In many states, once the burn plan is notarized, it becomes a legally binding document. Therefore, if you are conducting the burn with a smaller crew size than what you initially specified, your liability could increase in the event that something goes wrong.

(5d). Special precautions:

There will usually be something in the vicinity where you are burning which you don't want damaged by your fire. It could be a Streamside Management Zone around a stream, a hunting cabin, etc. Anything of this nature needs to be noted on the burn plan and the site specific map.

(5e). Notify if needed:

Emergency contacts have to be listed on your burn plan because you won't have the time to look up numbers if something goes wrong with your fire. Those listed can be notified prior to the start of burning, to alert them to the fact that you will be burning that day. Also, it is good to put in the names of people who live the vicinity of the area you are burning. Some may have health concerns, or other issues, which would make fire and smoke hazardous for them. Notifying them ahead of time can save you, and them, a lot of time and trouble later on.

(5f). Smoke management:

One of the most important activities when planning a prescribed burn is to determine if there are any smoke sensitive, or smoke critical areas present. This is important for safety and liability concerns. In general, the steps established in Wade and Lunsford (1989) are good procedures to follow for the smoke management plan for any prescribed burn. Major steps include:

1. Plot the direction of the smoke plume – Using the regional scale map, plot the anticipated down wind smoke movement;
2. Identify smoke sensitive areas – Smoke sensitive areas are areas which your smoke could have a negative impact, e.g., towns and cities, airports, roads and highways, hospitals, nursing homes, schools, and farms (chickens especially);
3. Identify smoke critical areas – Smoke critical areas are locations that already have an air quality problem or smoke sensitive areas in the path of your smoke;
4. What to do if smoke critical areas are present – If smoke critical areas are present, you can not burn under the proposed prescription. However, you do have the following options: don't burn at all; change the prescription and go through the smoke management system again; do something other than burning (e.g., use mechanical operations or herbicides).

(5g). Firing techniques:

There are a number of different firing techniques which can be used. Ignition procedures should be documented in the same manner as fire lanes. This allows for consistency on the burn plan,

and is most important for safety. An explanation of firing techniques can be found in Wade and Lunsford (1989).

**Requirement 6:**

Range of desired weather - The desired weather conditions under which you can conduct the burn needs to be documented here. This includes surface and transport wind speeds, mixing heights, stagnation indices, relative humidity, temperature, and time of day to start the fire. The transport wind speed needs to be at least 3.5 meters per second and the mixing height 500 meters. These conditions are set by Mississippi law, and need to be met before a burning permit can be issued. A stagnation index number also needs to be on the prescribed burning plan. The Stagnation index is an indicator of the length of time conditions that will be appropriate for adequate smoke dispersal. In other words, the stagnation index indicates the length of time for which the prescribed burning permit is valid for. In essence, your fire must be out by the time indicated by the stagnation index.

Specifically, for daytime,  
the stagnation indices have the following values:

- 0 - Burning permitted from sunrise to sunset;
- 1 - Burning permitted from 1 hour after sunrise until sunset;
- 2 - Burning permitted from 2 hours after sunrise until sunset; and
- 3 - Burning permitted from 2 hours after sunrise until 1 hour before sunset.

■ For night time, these values are:

- 0 - Burning permitted from sunset to sunrise;
- 1 - Burning permitted until 2 hours before sunrise;
- 2 - Burning permitted until 4 hours after sunrise; and
- 3 - No burning permitted.

**Requirement 7:**

Summary of burn - Once the burn is completed, you need to conduct a summary of the burn. How many acres actually burned, the techniques used (which should match up with what you said you were going to do), the time the fire was set, time period for which your permit was valid (check with your state forestry office) as well as weather conditions on the day of the burn. Depending on the objectives of the burn, you can include the number of acres of jump overs, measures of crown scorch, etc., if any such items have occurred.

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***Burning Permit for Prescribed burning***

Currently, the Mississippi Forestry Commission requires forest landowners and/or burners to get a burn permit before burning. Contact your county office for permit information. Only when conditions to burn

are favorable, can the burn permit be granted. These favorable conditions include a minimum mixing height of 500 meters and a transport wind speed of at least 3.5 meters per second. These requirements are to insure that federal air quality laws are followed.

# SUMMARY

The potential liability associated with escaped fires and smoke has been a widespread concern to forest landowners and managers in using prescribed burning on private forest land. In this publication, the legal environment of prescribed fire in Mississippi has been reviewed and summarized from the perspective of common law, statutory law, and administrative law. The review of these relevant Mississippi cases in the past century revealed that the standard of care associated with simple negligence has been required for the intentional use of fire on forest land with a lawful purpose. Furthermore, the enactment of the Mississippi Prescribed Burning Act in 1992 confirmed and codified these principles in the statute. The Act also explicitly recognizes that prescribed burning is a property right and land management tool that greatly benefits society, the environment, and the economy of the state. This statute on prescribed burning activities has been welcomed by the forestry community in Mississippi.

Along with the passage of the Prescribed Burning Act, there has been increasing administrative

regulations on the use of prescribed burning in Mississippi. The requirement of certified prescribed burn manager, coupled with the written, notarized burn prescription, should foster a higher degree of professionalism. Prescribed burners now know that so long as they conduct prescribed burns in conformity with the requirements of the law, they will not be held liable for damage or injury caused by fire or resulting smoke unless negligence is proven.

The Mississippi Prescribed Burning Act of 1992 has not been challenged in or explained by the courts in Mississippi. It remains to be seen how the courts will treat independent contractors in relation to the Respondeat Superior doctrine. The answer may be revealed through future court decisions that interpret that portion of the statute. While prescribed fire will continue to be an important management tool for the forest land community, its legal environment along with the liability issues merit further observation and analysis in the future.

# USEFUL LINKS TO PRESCRIBED BURNING

Mississippi Forestry Association  
[msforestry.net](http://msforestry.net)

Mississippi Forestry Commission  
[www.mfc.state.ms.us](http://www.mfc.state.ms.us)

Mississippi State University Extension Service  
(MSU-CARES, Coordinated Assess to the Research and Extension System)  
[msucares.com/forestry/index.html](http://msucares.com/forestry/index.html)

Mississippi Statutes (e.g., the Prescribed Burning Act of 1992)  
[www.mscode.com](http://www.mscode.com)

# REFERENCES CITED

Gloster Lumber Company v. Wilkerson, 79 So. 96 (MS Sup. 1918).

Gulf Oil Corp. v. Turner, 235 So.2d 464 (MS Sup. 1970).

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# EXHIBIT I

## Gulf Oil Corp. v. Turner, 235 So.2d 464 (MS Sup. 1970)

GULF OIL CORP. v. Mrs. Alice D. TURNER

No. 45803

Supreme Court of Mississippi

235 So. 2d 464; 1970 Miss. LEXIS 1453

May 11, 1970

**SUBSEQUENT HISTORY:** Rehearing Denied June 8, 1970.

**DISPOSITION:** Affirmed.

**COUNSEL:** M. M. Roberts, S. Wayne Easterling, Hattiesburg, for Appellant. William E. Andrews, Jr., Purvis, Zachary, Weldy & Ingram, Hattiesburg, for Appellee.

**JUDGES:** Gillespie, Presiding, Justice, wrote the opinion. Rodgers, Patterson, Smith and Robertson, JJ., concur.

**OPINION BY:** GILLESPIE

**OPINION:**

Mrs. Alice D. Turner (hereinafter plaintiff) sued Daniel J. Nicovich, Bradley Brothers, which is a corporation, Gulf Oil Corporation, Broome Construction Company, Inc., and Capitol Transport Company, Inc., in the Circuit Court of Lamar County for injuries sustained in a vehicular collision. The suit was non-suited as to Capitol Transport Company, Inc. Judgment was rendered in favor of plaintiff against Gulf only on the following comprehensive verdict returned by the jury:

1. We, the jury, find that Broome Construction Co., Inc., is free of any negligence by a unanimous vote.
2. We, the jury, find that Bradley Bros., Inc., is free of any negligence by a unanimous vote - let that also stand for the driver Daniel J. Nicovich.
3. We, the jury find that Gulf Oil Corp. is guilty of negligence as stated in the plead (sic) of the plaintiff by a unanimous vote.
4. We, the jury, find Mrs. Alice D. Turner guilty of some negligence by a unanimous vote.
5. We, the jury, find or award to the plaintiff, Mrs. Alice D. Turner, a sum of \$55,000.

There from Gulf appeals. The judgment below is affirmed.

I.

Gulf contends that the trial court erroneously refused to instruct the jury that it was entitled to a verdict as a matter of law. With regard to deciding a case as a matter of law which necessitates a finding that the evidence was insufficient to establish a jury issue, the oft-announced rule is that this Court must view the evidence in the light most favorable to the party in whose favor the jury returned the verdict. We must consider as true all evidence favorable to the successful party and assume that the jury drew every permissible inference in reaching its verdict. All conflicts in the evidence are resolved in favor of the prevailing party and this Court may not consider any evidence favorable to the other party except that which is uncontradicted. The facts of the present case are recited with these observations as a guide, and the ultimate facts, not the evidence, are so stated.

Gulf, as operator of an oil refinery in Lamar County, Mississippi, had a contract with Broome whereby Broome performed maintenance and construction services for Gulf as were from time to time required. At 7:30 on the morning of February 7, 1968, upon Gulf's request, Broome furnished one of its employees, Edwin Hendrix, to assist Gulf in the burning of a wooded area south of Black Creek, west of U.S. Highway 11 and near Gulf's refinery. Hendrix reported to W. E. Lott, a foreman or supervisor for Gulf; as instructed by Lott, Hendrix went with Lott to the northwest corner of the one hundred acre tract where both of them proceeded to set fire to the woods at several points. About 8:30 a.m. both Lott and Hendrix departed, leaving no one in charge of the burning woods which were separated from the adjacent woodlands by several roads and Black Creek. At 10:00 a.m. the wind was blowing from the northwest at ten miles per hour and the fire had reached that part of the woods bordering U.S. Highway 11. Dense clouds of smoke were crossing the highway.

About 10:15 a.m. the Bradley Brothers truck was traveling south on Highway 11 when its driver Nicovich observed the smoke about a quarter of a mile before arriving at Black Creek. At times he could see through it but some gusts of smoke were too dense to enable him to see ahead. Nicovich was proceeding behind a tank truck purportedly owned by Capitol Transport Company. Both trucks entered the area of the smoke at a speed of twenty miles per hour. After Nicovich had progressed a distance of about one hundred feet in the smoke, the vehicle driven by plaintiff collided with the rear of his truck. Plaintiff saw the smoke as she approached Black Creek at a speed of sixty to sixty-five miles per hour. She turned her lights on and released the pressure of the accelerator which slowed her vehicle to some extent. As she entered the smoke area a dense blanket of black smoke enveloped her car; thereafter she was unable to remember what transpired.

An official of the Mississippi Forestry Commission stated that the day of the accident was unsuitable for burning woods according to that day's fire danger rating which was ascertained by computing such matters as wind velocity, relative humidity, temperature, and ground moisture conditions. Neither Gulf nor Broome contacted the Forestry Commission before setting the fire.

The contention that Gulf was entitled to a verdict as a matter of law is based on several separate grounds.

A. Gulf maintains that the exoneration of Broome by the jury is likewise an exoneration of Gulf with whom Broome had contracted to burn the woods since the jury must find Broome liable before it could render a verdict against Gulf. The decisions of when to burn the woods and where to set the fires were made by Gulf whose foreman Lott not only directed Broome's employee Hendrix but who personally assisted in igniting the fires. Thus, the firing of the woods was the direct act of Lott, Gulf's employee. Moreover, even if only liable vicariously because of the acts of Broome's employee, Gulf could not take advantage of the exoneration of Broome. In *Gulf Refining Co. v. Myrick*, 220 Miss. 429, 71 So.2d 217 (1954), the jury exonerated Gulf's truck driver yet rendered a verdict against Gulf based on the negligence of said truck driver; the judgment against Gulf was affirmed.

B. Gulf asserts that the sole proximate cause of the accident was the negligence of plaintiff. Plaintiff was negligent, and the jury specifically so found. We are of the opinion that the authorities cited by Gulf do not sustain its position that plaintiff's negligence was the independent, intervening, sole cause of the accident. In our opinion Gulf was negligent and that its negligence was a concurrent contributory cause to the accident. *Keith v. Yazoo & M.V.R.Co.*, 168 Miss. 519, 151 So. 916 (1934). In the recently decided case of *Merchants Co. v. Way*, 235 So.2d 278 (Miss. 1970), suit was brought for the wrongful death of Mrs. Way against Merchants Company, owner of a truck, into the rear of which Mrs. Way's husband collided, resulting in the death of Mrs. Way. The accident, which occurred in smoke from burning woods, was similar to the present one. In that case this Court reversed the judgment against

# EXHIBIT I (continued)

Merchants Company and held that the sole proximate cause of the accident was the negligence of Mr. Way. In the Way case, only the Merchants Company was sued, without joining the party, if any, responsible for the woods being ablaze. The Court found as a matter of law that Merchants Company was not guilty of negligence; thus the sole proximate cause of the accident was Mr. Way, so far as that suit was concerned.

C. Gulf further argues that neither Broome nor Gulf was negligent in setting the woods on fire. Gulf asserts that the fire was ignited at a time when the wind was not blowing, the grass and other material were moist, and nothing revealed that wind or other factors which might affect the safety of burning the woods could have been anticipated. The basis of this argument is invalid. Neither Gulf nor Broome called the Forestry Commission at its station only nine miles away or the weather bureau to determine whether the day was suitable for burning woods. They did not wait until later in the day to determine what wind conditions would develop. The Texas case cited, if in point, must yield to our own case of *Keith v. Yazoo & M.V.R.Co.*, supra, wherein the Court said:

The jury were warranted in finding that the fire producing the smoke was negligently set out on a windy day, that the fire was set to highly inflammable dry matter and in close proximity to a public highway, and that the smoke would be blown on and across the highway, causing thereby an effectual barricade. In this situation, we think a jury would be warranted in finding that the agent and employees of the railroad company might reasonably foresee that some injury might result to those who had the right to travel the public highway at that and other points. (168 Miss. at 523, 524, 151 So. at 917).

D. Gulf also maintains that it was entitled to judgment as a matter of law because if liability exists, then Broome is primarily responsible. This argument is founded upon the assertion that Broome was an independent contractor responsible for burning the woods, and that Lott in assisting Hendrix in setting out the fire was a loaned employee of Broome. There is no merit in this argument. Hendrix, Broome's employee, was a laborer with instructions to do what Lott, Gulf's foreman, directed him to do. Lott controlled Hendrix in burning the woods. Broome's employee was not independent of Gulf nor was Lott a loaned employee of Broome.

II.

Gulf assigns as error the action of the trial court in not admitting in evidence the contract between Gulf and Broome, which was introduced and admitted for identification only. By its terms Broome contracted to perform as an independent contractor maintenance services as required by Gulf. It should be noted that on this appeal Gulf named Broome as an appellee and that Broome filed a brief as an appellee. Gulf contends that the judgment either should be corrected to render it joint and several against Gulf and Broome, or corrected to reverse and render as to Gulf, or that the case should be remanded for a new trial. No authority is brought forward in support of this argument. This is a personal injury suit sounding solely in tort. Gulf attempts to create a contractual issue between it and Broome based on the therein contained indemnity clause. We hold that the court correctly refused to admit the contract in evidence.

III.

Gulf maintains that the verdict of \$55,000 is grossly excessive. The demand was for \$110,000. Plaintiff, who was forty-seven years of age at the time of her injury, sustained serious injuries to her lungs and suffered multiple rib fractures, a crushed chest wall, a fracture of the right thigh, deep lacerations of the forehead and an injury to her ankle. She developed pneumonia, atelectasis of the lungs and other respiratory difficulty necessitating a tracheostomy. She had an operation upon her leg, stayed in the hospital forty-nine days and will require one additional operation. Her medical bills to date of trial amounted to \$7,921.78 despite the prospect of an additional operation. Plaintiff has a twenty-five percent permanent impairment of the lower right extremity. Plaintiff, a licensed practical nurse with an earning capacity of \$285 to \$350 per month, was at the time of the trial still unable to return to work. Her injuries were such that testimony reveals that she would have in all probability died at the scene except for the services of Dr. Lloyd L. Broadus of Purvis, Mississippi, who immediately responded to a call for assistance. Since plaintiff's chest wall was crushed, she was unable to breathe and had turned blue. The doctor manipulated her body to allow her breathing to be restored. We cannot say that the damages are so grossly excessive as to justify intervention by this Court, notwithstanding plaintiff's contributory negligence.

We have carefully considered the other questions raised in Gulf's brief. Having reviewed the record as a whole and the arguments of counsel, we find no reversible error.

Affirmed.

RODGERS, PATTERSON, SMITH and ROBERTSON, JJ., concur.

# EXHIBIT I I

## Mississippi Prescribed Burning Act of 1992

Mississippi Code of 1972 Annotated  
Title 49. Conservation and Ecology  
Chapter 19. Forests and Forest Protection

### § 49-19-301. Short title

Sections 49-19-301 through 49-19-307 may be cited as the “Mississippi Prescribed Burning Act.”

### § 49-19-303. Legislative findings

- (1) The application of prescribed burning is a landowner property right and a land management tool that benefits the safety of the public, the environment and the economy of Mississippi. Pursuant thereto, the Legislature finds that:
- (a) Prescribed burning reduces naturally occurring vegetative fuels within wild land areas. Reduction of the fuel load reduces the risk and severity of major catastrophic wildfire, thereby reducing the threat of loss of life and property, particularly in urbanizing areas.
  - (b) Most of Mississippi’s natural communities require periodic fire for maintenance of their ecological integrity. Prescribed burning is essential to the perpetuation, restoration and management of many plant and animal communities. Significant loss of the state’s biological diversity will occur if fire is excluded from fire-dependent systems.
  - (c) Forest lands constitute significant economic, biological and aesthetic resources of statewide importance. Prescribed burning on forest land prepares sites for reforestation, removes undesirable competing vegetation, expedites nutrient cycling and controls or eliminates certain forest pathogens.
  - (d) The state manages hundreds of thousands of acres of land for parks, wildlife management areas, forests and other public purposes. The use of prescribed burning for management of public lands is essential to maintain the specific resource values for which these lands were acquired.

(e) Proper training in the use of prescribed burning is necessary to ensure maximum benefits and protection for the public.

(f) As Mississippi's population continues to grow, pressures from liability issues and nuisance complaints inhibit the use of prescribed burning.

(2) It is the purpose of §§ 49-19-301 through 49-19-307 to authorize and promote the continued use of prescribed burning for ecological, silvicultural and wildlife management purposes.

#### § 49-19-305. Definitions

As used in this section unless the context requires otherwise:

(a) "Prescribed burning" means the controlled application of fire to naturally occurring vegetative fuels for ecological, silvicultural and wildlife management purposes under specified environmental conditions and the following of appropriate precautionary measures which cause the fire to be confined to a predetermined area and accomplishes the planned land management objectives.

(b) "Certified prescribed burn manager" means an individual or county forester who successfully completes the certification program approved by the Mississippi Forestry Commission.

(c) "Prescription" means a written plan for starting and controlling a prescribed burn to accomplish the ecological, silvicultural and wildlife management objectives.

#### § 49-19-307. Liability for prescribed burns

(1) No property owner or his agent, conducting a prescribed burn pursuant to the requirements of this section, shall be liable for damage or injury caused by fire or resulting smoke unless negligence is proven.

(2) Prescribed burning conducted under the provisions of this section shall:

(a) Be accomplished only when at least one (1) certified prescribed burn manager is supervising the burn or burns that are being conducted;

(b) Require that a written prescription be prepared and notarized prior to prescribed burning;

(c) Require that a burning permit be obtained from the Mississippi Forestry Commission; and

(d) Be considered in the public interest and shall not constitute a public or private nuisance when conducted pursuant to state air pollution statutes and rules applicable to prescribed burning.

(3) The Mississippi Forestry Commission shall have the authority to promulgate rules for the certification of prescribed burn managers and guidelines for a prescribed burn prescription.

(4) Nothing in this section shall be construed to limit the civil or criminal liability as provided in Section 97-17-13 and Section 95-5-25, Mississippi Code of 1972.

# EXHIBIT III

## A Sample Plan of Prescribed Burn Prescription in Mississippi (Adapted from Londo et al. 2005)

40: NE 1/4 SE 1/4                      Section: 4                      Township: 16N                      Range: 14E  
County: Winston                      State: Mississippi

### Name of Owner

Name: Mississippi State University                      Plan prepared by: Dr. Andrew J. Londo  
Address: Mississippi State, MS 39762                      Date plan written: Feb 28, 2001  
Approved by (Notary): \_\_\_\_\_                      Date burn executed: March 10, 2001  
Burn permit number: \_\_\_\_\_

### Stand Description

1. Overstory: None
2. Understory: Some Light Brush
3. Fuels: Fuel Model 11, Light Slash
4. Topography and soils: Flat, clay loam soils

**Purpose of the Burn:** This site is being burned for site preparation in order to replant pine.

### Pre-Burn Information:

 (See attached maps)

1. Fire Lanes: Exterior: A-B, B-C, F-H, H-G                      Interior: D-C, and E-F (To protect SMZ)
2. Other Barriers: Natural: Unnamed Creek in Center of Burn Area  
Man Made: Curtis Hamill Road along entire western boundary of burn area and Unnamed road on the north side from pts A-B.
3. Acres to be Burned: ~40
4. Crew Size: 4 with Experience
5. Fire Units: 1 Water Truck; 1 Bulldozer
6. Special Precautions: Keep fire and fire lanes out of SMZ along unnamed creek, experimental plantings to west, mature timber to the north, south and east.
7. Notify (if needed): Winston County Sheriff (662) 773-5881;  
Noxubee Wildlife Refuge, (662)323-5548;  
Oktibbeha County Sheriff (662) 323-1356;  
Oktibbeha County office of the MS Forestry Commission (662) 323 6221;  
Winston County office of the MFC (662) 773 2191.
8. Smoke Management
  - a. Smoke Sensitive Areas: Wildlife Refuge, Highway 25, any houses in the area, churches
  - b. Smoke Critical Areas: None
9. Firing Techniques: Back fire along north side from points A-B along Unnamed Road and From points. E-F along fire break installed along the SMZ. A strip head fire starting at G-H, with strips about 3 Chains apart. When southern compartment burned, then strip head from D-C, with trips about 3 chains apart.

### Range of Desired Weather

1. Surface wind speed: 10-15 MPH, SW
2. Transport wind speed: > 3.5m/s
3. Mixing Height: > 500m
4. Stagnation Index: 0-2
5. Relative Humidity: 30-40%
6. Temperature: High 90° Low 70°
7. Time of day to start: 9:00 -10:30 AM

### Summary of Burn

1. Acres burned: 43
2. Firing techniques: See Above
3. Date burned: March 10, 2001
4. Time set: 9:30 AM
5. Time permit in effect: Sunrise to 1hr Before Sunset
6. Actual weather conditions

Surface wind (Dir and Speed) 12mph, s.w.

Transport Wind: 5 m/s

Mixing Height 700 m

Stagnation Index: 1

Temperature (High) 89 (Low) 71

Relative Humidity: 34%

Remarks: Complete burn, with only two minor jump-overs. Jump-overs resulted in an extra acre being burned. No damage done as a result of jump-overs.

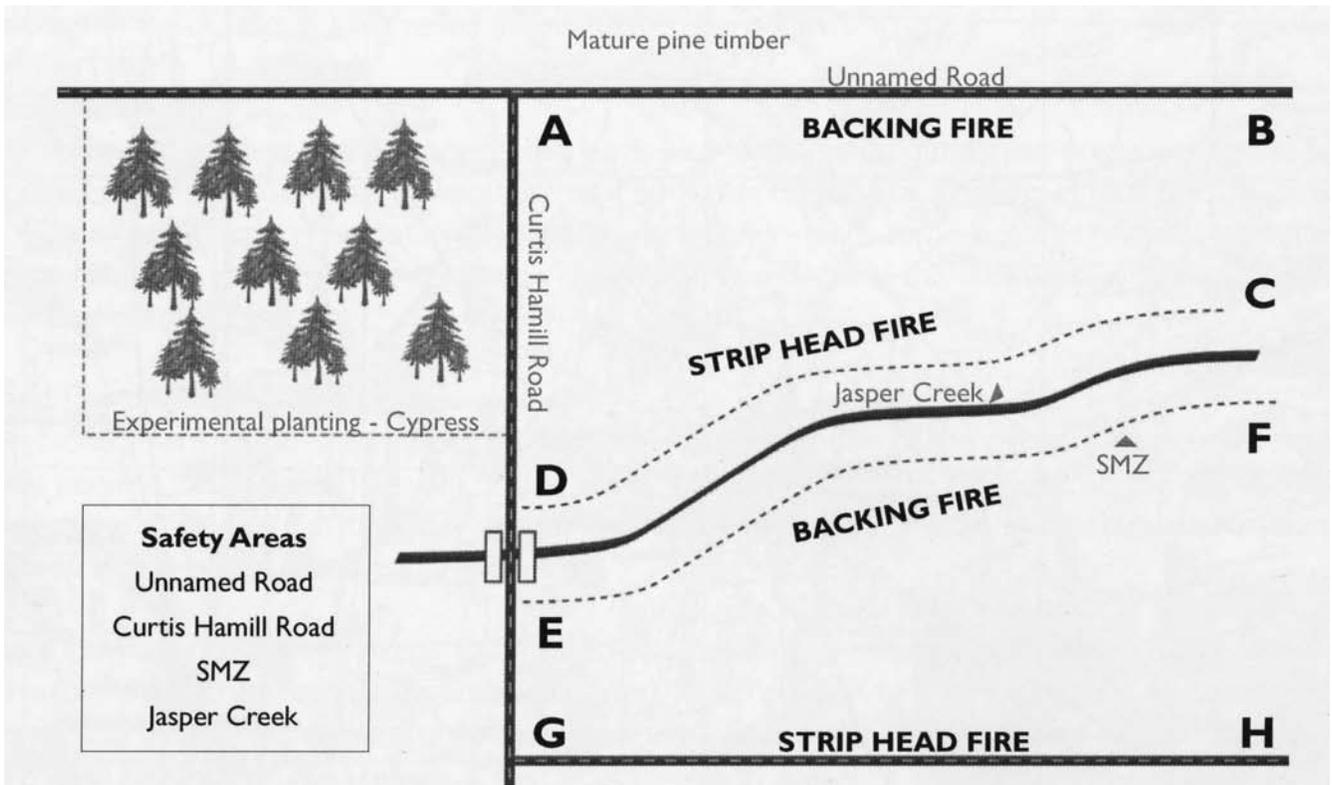


Figure 1 Site Map for the Prescribed Burn Sample Plan (Adapted from Londo et al. 2005)

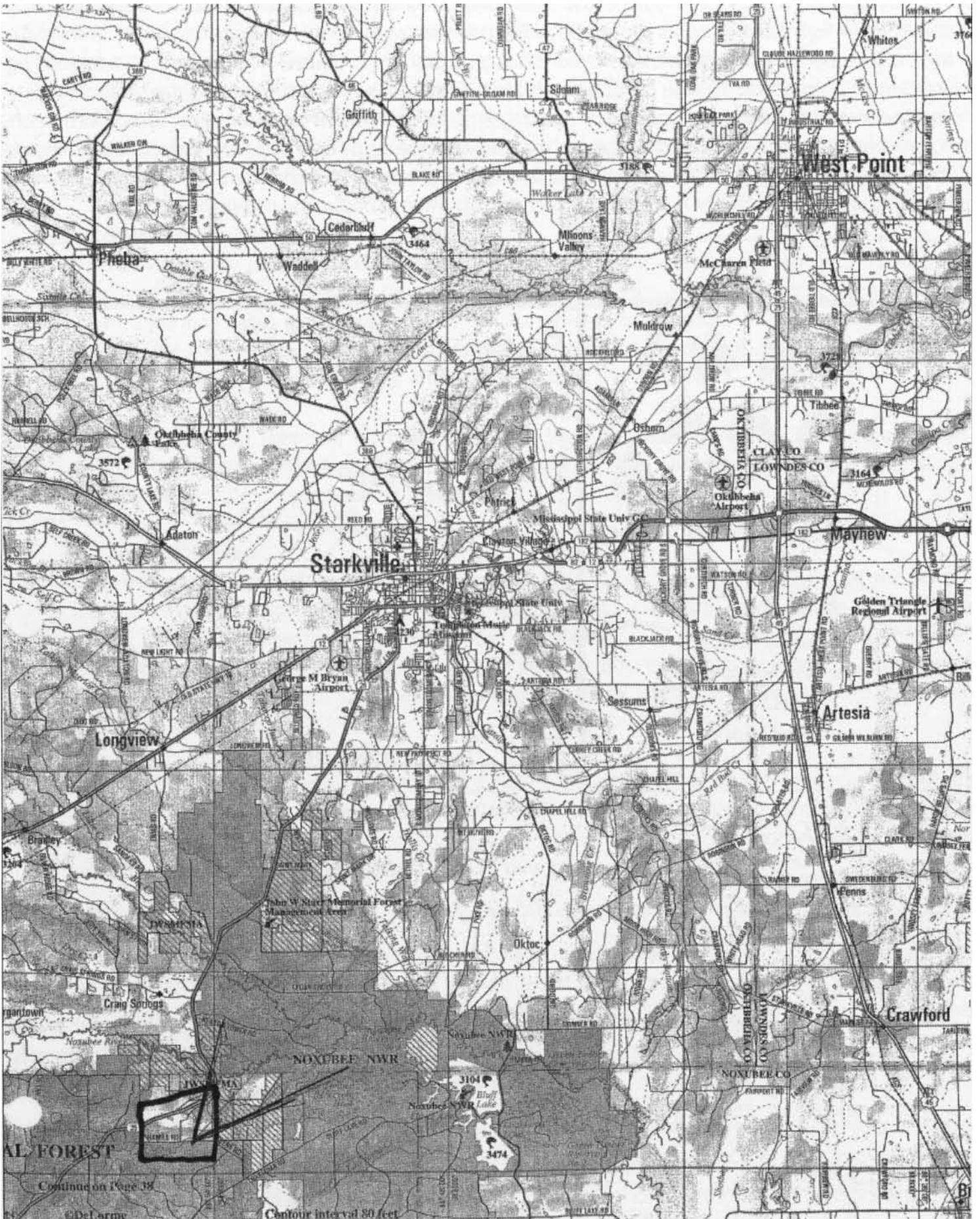


Figure 2 Area Map for the Prescribed Burn Sample Plan (Adapted from Londo et al. 2005)

