

Under our care

*Fire in the
Mountain State*



The WEST VIRGINIA

wildfire Protection Program

West Virginia Division of Forestry



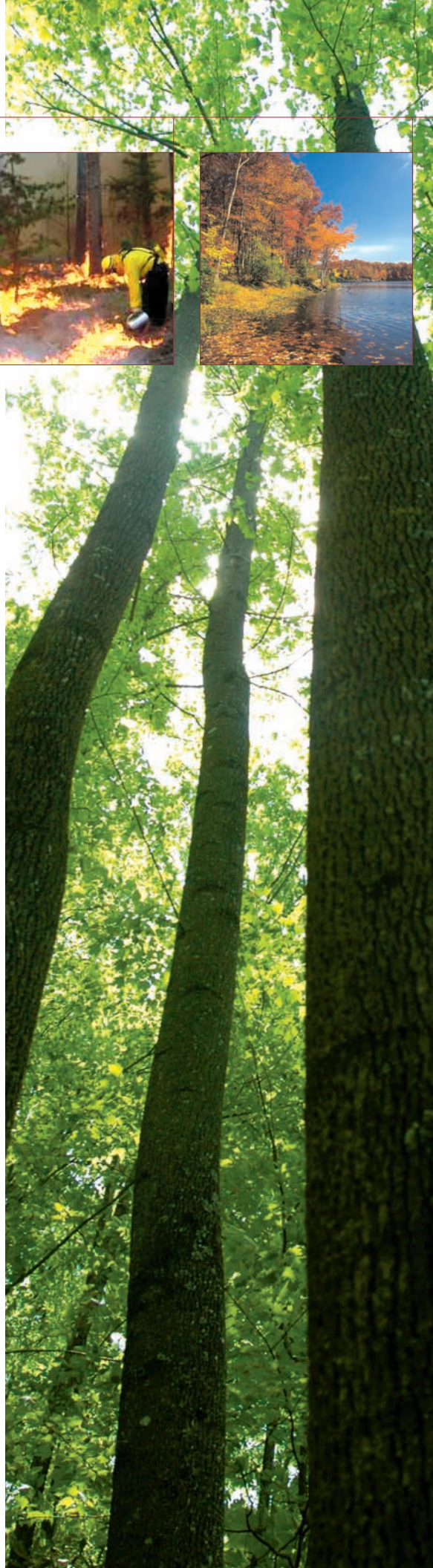
West Virginia Wildfire *Protection Program*

Defending the State's Forest Resource from Wildfire

Introduction

The Mountain State is covered with rich, hardwood forests that provide not only gorgeous scenic beauty, but also improved quality of life for West Virginia's residents. Healthy forests are crucial to air and water quality, acting as a filter to reduce air pollutants like carbon monoxide and controlling erosion and stabilizing stream banks – key elements to good water quality. West Virginia's forests also contribute immensely to the state's economy by providing enough raw materials to support a \$4 billion a year wood products industry. An expanding specialty forest products industry also depends on healthy forests to produce medicinal plants like ginseng and goldenseal, and other specialty products like fruits, nuts, berries and mushrooms.

Although West Virginia's forests provide multiple benefits, they also face numerous dangers. Invasive species of insects, diseases and plants threaten the health of our forests. Large numbers of forest landowners face constant pressure from developers to sell their forested property so that it can be converted to other non-forest uses. Despite these and other substantial threats to West Virginia's forests, there is one even more deadly risk: wildfire.





Detrimental Effects of Wildfires on West Virginia's forests:

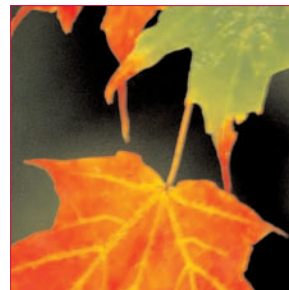
In some areas of the United States, fires can be beneficial to forestland, helping to regenerate certain tree species; however, that is not the case in most of West Virginia. Eastern hardwood forests comprised of ash, yellow poplar, beech, maple and cherry are easily damaged by fire, resulting in reduced quality of timber, and often mortality in smaller trees. Many times large hardwood trees are not actually killed by wildfire but do receive damage to the base of their trunks, in the "butt log," the most valuable part of a tree. As a tree continues to age, damage increases often reducing the value of the tree by 60 percent to 75 percent. A tree that has been damaged by fire will never recover.

Wildfires contribute to decreased water quality and increased potential for soil erosion. When a fire sweeps through forested land it destroys the humus layer of organic material that covers the forest floor. This layer, often called duff, has two key roles in regard to forests and water. During periods of heavy rainfall, duff acts as a sponge and retains water, releasing it slowly. Duff also works as a filter, keeping sediment out of the water system. In recent years, areas which have had repeated wildfires, like many of our southern counties, have experienced more floods than other parts of the state.

Wildfires also impact West Virginians' quality of life. Smoke from wildland fires pollutes the air making it harder to breathe, especially for those with respiratory ailments. Wildfires also affect wildlife, occasionally killing forest animals, but more often affecting their homes, thereby impacting recreational activities like hunting and fishing.

The economic effects of wildfires are staggering. The Division of Forestry estimates that for every acre of forestland burned by wildfire, the state loses \$300 of potential revenue. In 2001, more than 89,000 acres of forestland were burned by wildfires – that's an estimated loss of \$26.7 million to West Virginia's economy.

Prescribed fires, carefully managed under controlled conditions, can have positive impacts on wildlife, recreation and certain tree species. But these prescribed fires are generally not well-suited to most of West Virginia's forests. Numerous scientific studies are under way on this topic.





West Virginia

Wildfire protection program

At the turn of the 20th century, wildfires devastated West Virginia's forests. By 1908, more than 1.7 million acres of forestland had been destroyed by the ravages of wildfire. To protect our forests, the state's only renewable resource, the West Virginia Legislature enacted the Reform Law of 1909. Under this legislation the Division of Forestry was formed with the mandate to confine, extinguish or suppress fires throughout the state. Today the Division of Forestry is responsible for protecting nearly 12 million acres of forestland across West Virginia.

Since it was established in 1909, the Division of Forestry's top priority has always been protecting the state's forest resource from wildfire. To facilitate the protection of West Virginia's forests from fire, the wildfire protection program is divided into three areas: prevention, preparedness and suppression.

Smokey Bear has been the Division of Forestry's main ally in the fight against careless forest fires for more than 60 years. Forestry personnel often accompany Smokey Bear on visits to schools, fairs, festivals and other events to remind residents that "Only You Can Prevent Wildfires."

Another weapon in the Division of Forestry's fire prevention arsenal is the Firewise West Virginia program. This program educates homeowners about the damage wildfires can cause to homes located adjacent to woodlands, and develops strategies to minimize that potential damage. Firewise West Virginia currently is active in 10 counties: Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan, Pendleton, Pocahontas and Tucker.



Protecting 12 million acres of forestland is a monumental task and requires the help of many partners and various tools. The Division of Forestry recently installed 13 Remote Automated Weather Stations (RAWS) at strategic points throughout West Virginia to provide updated weather data that is used to predict fire behavior and wildfire danger. The data collected from these RAWS units is used to create a map that is posted on the Forestry Division's Web site (www.wvforestry.com) to inform the public and local cooperators of the potential for dangerous fire weather.

The Division of Forestry also relies heavily on the assistance of local cooperators like volunteer fire departments, local fire warden, the National Guard, prison inmates and trained volunteers to aid in wildfire suppression. Volunteer firefighters often are the first responders on the scene of a forest fire. By working diligently to keep fires from spreading, volunteer firefighters save many acres of West Virginia's forestland from destruction by wildfire. The Division of Forestry is indebted to all the state's volunteer fire departments and firefighters for their dedication defending West Virginia's forests from catastrophic wildfires.

To aid these local cooperators, the Division of Forestry provides training, personal protective equipment and excess military equipment to those who assist with suppression efforts. The division also conducts nationally accredited wildland fire suppression training that qualifies personnel to assist in national wildfire emergencies. In recent years, the Division of Forestry has sent personnel to Alaska, California, Louisiana, Minnesota, Nebraska, Nevada, New Mexico, Ohio, Oregon, Texas and Wyoming to help with fire emergencies.

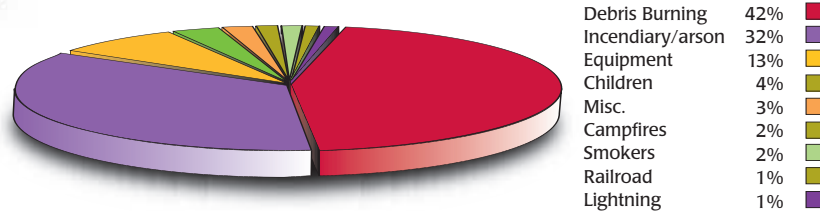




Fire *Seasons*

Forest fire danger is present throughout the year, but most wildfires in West Virginia occur in spring and fall. During these two seasons, the Mountain State's usually moist forests dry out quickly on warm, windy days, making the leaves, twigs, branches and brush on the forest floor ample fuel for a fire. March through May is the Spring Forest Fire Season and October through December is the Fall Forest Fire Season. During these months, outdoor burning is restricted to evening hours to reduce the risk of fire escaping and spreading into the surrounding woods.

Fire *Causes*



9 categories of wildfire causes

The Division of Forestry utilizes the National Standard to track wildfire causes and divides them into nine categories.

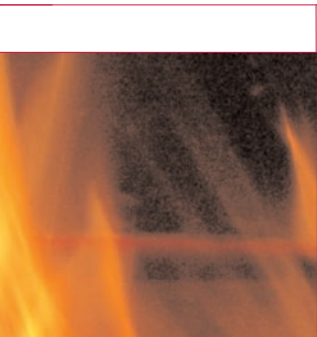
Outdoor burning restrictions

- No outdoor burning from 7 a.m. to 4 p.m.
March 1 - May 31 and October 1 - December 31
- All fires must be attended until the fire is completely extinguished
- A safety strip no smaller than 10 feet wide must be created around the material being burned

Unlike wildfires in the western United States that are often started by lightning, 99 percent of West Virginia's forest fires are caused by humans.

Although they often switch first and second place with each new fire season, there are two major causes of wildfires in West Virginia: escaped debris fires and arson. Landowners often take advantage of warm spring and fall days to burn leaves and brush. Unfortunately, many landowners do not follow outdoor burning restrictions and, through their own carelessness, allow fires to escape and ignite the woods, destroying valuable timber.





Arson Hotline 1-800-233-FIRE

Anyone with information about a suspicious fire should call the Arson Hotline.

A \$2,500 reward is offered for information leading to arrest and conviction of arsonists in West Virginia.

Some landowners work under misconceptions that fire will drive away poisonous snakes or rid their property of unwanted briars and underbrush. These common myths have led to the destruction of thousands of acres of forested land. Those landowners who have intentionally set fires on their property to rid themselves of snakes and briars have found that the snakes merely go underground until the fire has passed, and the briars they sought to destroy only grow back thicker after being burned.

Arsonists pose another danger to West Virginia's forests and to the well-being of the citizens of the Mountain State. Arson is defined as the malicious or fraudulent burning of property, and people that intentionally set fires are called arsonists. These criminals are extremely dangerous because they have no regard for the safety of others or respect for other people's property. Arson fires are most often set in isolated areas and are difficult for fire crews to locate and control. Anyone with information about a suspicious fire should call the Arson Hotline at 1-800-233-FIRE (3473). A \$2,500 reward is offered for the arrest and conviction of arsonists in West Virginia. Willfully setting fires is a felony and punishable by a fine and/or prison sentence.

Besides escaped debris burning and arson, there are seven additional causes of forest fires in West Virginia including equipment use, smokers, children, railroad, campfires, lightning and miscellaneous. Fires categorized as miscellaneous are ignitions such as structure fires or underground mine fires that set the woods ablaze. Although the fires classified as miscellaneous may not be responsible for the majority of wildfires in the state, they are responsible for a large number that occur each year.

Common *myths* about fire

myth Burning the woods rids them of poisonous snakes and ticks.

truth Snakes are heat sensitive and can easily escape an oncoming fire.

myth Burning the woods rids them of briars and unwanted underbrush.

truth After a forest fire, undamaged rootstocks sprout with renewed vigor and actually improve habitat for ticks and snakes





Wildland Firefighting *in the Mountain State*

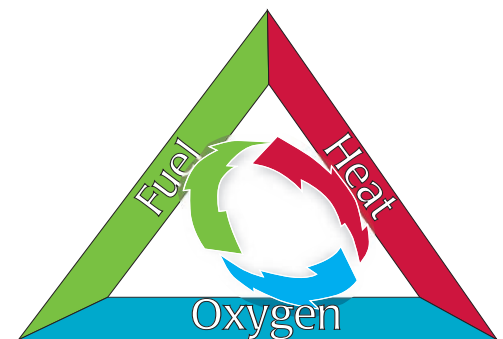
Unlike a structure fire that can be extinguished with water from a nearby hydrant, forest fires are not as easily suppressed. Forest fires most often happen in remote locations that do not have immediate access to water. To fight wildland fires in West Virginia, firefighters remove fuel, including logs, limbs, leaves and brush, from the fire's path. This is a difficult, dirty and dangerous job. Wildland firefighting is especially dangerous in the rugged terrain of the Mountain State where fire can quickly race from a hollow to a ridge top, burning a path of destruction along its way. Firefighters must navigate rough terrain while using specialized tools such as a fire rake or Pulaski. Windy conditions, loss of daylight, limited communications and changing fire behavior contribute to the dangerous environment wildland firefighters face in West Virginia's woodlands.

Ninety-nine percent of all *wildfires are preventable*

Ninety-nine percent of all wildfires in West Virginia are caused by humans.

Therefore, they can be prevented. Residents must take an active stand in helping to prevent wildfires in West Virginia and should always remember the words of Smokey Bear when dealing with fire,

“Only You Can Prevent Wildfires.”



Fire Triangle

It takes **fuel**, **heat** and **oxygen** for a fire to burn. Removing any one of these three items will cause the fire to go out.



For more information visit
www.wvforestry.com or contact one of the
Division of Forestry offices listed below.

State Headquarters

1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0180
Office (304) 558-2788 • (304) 558-0143 fax

Fairmont Office

Route 2, Box 1100
Fairmont, WV 26554
(304) 367-2793 • (304) 367-2795 fax

Romney Office

1 Depot Street
Romney, WV 26757
(304) 822-4512 • (304) 822-7331 fax

Beckley Office

330 Harper Park Drive, Suite J
Beckley, WV 25801
(304) 256-6775 • (304) 256-6770 fax

Milton Office

P.O. Box 189
878 East Main Street Rear
Milton, WV 25541
(304) 743-6186 • (304) 743-0218 fax

Parkersburg Office

2309 Gihon Road
Parkersburg, WV 26101
(304) 420-4515 • (304) 420-4517 fax

Clements State Tree Nursery

624 Forestry Drive
West Columbia, WV 25287
(304) 675-1820 • (304) 675-6626 fax

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