



How You Can Prevent Forest Fires in the Hurricane Ivan Impact Area

By *Lou Hyman*, Assistant Fire Division Director, Alabama Forestry Commission

When Hurricane Ivan hit Alabama last fall, it damaged an estimated 11.8 million acres of forestland across the state. While a lot of the damage has been salvaged, many landowners still have stands with trees that are blown down or have tops broken out.

As the dead trees and tops dry out, they create increased wildfire hazards. These heavy fuels could cause even a small forest fire to intensify to dangerous levels.

Fire Behavior Problems

In February, 2005, the Alabama Forestry Commission (AFC) brought in a team of nationally certified Fire Behavior Analysts to look at the hurricane damaged area and identify potential fire behavior problems. The team found that storm damage varied greatly within the area, based on timber types and local wind conditions.

The biggest problem they identified was the heavy fuel loading as a result of tree blow-downs. These damaged areas had high fire hazards because of the large

amount of fuel on the ground, which means that a small fire can quickly escalate into a major conflagration. As these tops dry out, they become even more dangerous. In addition, the piled fuels create “fuel ladders” which enable the fires to climb off the ground surface and burn into the remaining tree crowns. Here they can cause severe damage and throw embers across the fire lines, increasing the spread of the fire.

Hurricane damage also creates fire containment problems and obstacles that hamper the building of control lines

around wildfires. The tops and fallen trees slow down the tractor-plows used by the AFC, forcing them to push through the obstacle or go around it. In a forest with heavy brush, these obstacles cause safety problems for the fire fighters by restricting their movements.

As a landowner, there are two ways to reduce the wildfire risk to your forest. One is to reduce the fuel loading and containment constraints, so that any fires would be low in intensity. The other action is to reduce the number of fires that occur.

Fire Mitigation

The first step that you as a landowner can take to reduce wildfire risk is to improve access within your forest. Existing firebreaks and woods roads should be cleared so that fire fighters can use them as a line of defense to stop wildfire. This is especially important around any homes or structures on the property. New firebreaks should be established to break up the property into manageable stands. These also help improve access into the property for recreation and when prescribed burning is done.

The best way to reduce fuel loading is to salvage the damaged timber. Salvage also reduces or eliminates the containment obstacles so that wildfires can be more easily controlled. Many landowners were able to salvage their timber this winter. Although damaged pine trees are not sellable for sawtimber now, harvesting them for pulpwood, even at depressed prices, will bring in some income and reduce the potential for catastrophic wildfires in your forest.

In some parts of the state, local contractors are available to come into the forest and chip up downed trees and tops. The resulting chips can be used for industrial fuel or other forest products, depending on local markets. There are also in-woods mulchers, which grind up the tops and spread the chips across the forest floor where the nutrients can be recycled. Both of these operations reduce the fire hazard by eliminating the heavy available fuel loads and opening up the stands for easy access.

Another way to reduce wildfire hazards is by prescribed burning. The careful use of controlled fire under exacting environmental conditions can eliminate hazardous fuels with minimal damage to

existing stands. Prescribed burning in stands with heavy hurricane damage is dangerous and requires the use of an experienced Prescribed Burn Manager. Burns need to be done during times of somewhat high relative humidity, and may take two or more burns to eliminate all the hazards.

Fire Prevention on Your Farm

The best way to prevent wildfire damage on your farm is keep wildfires out of the forest. The most common causes for wildfires in Alabama are careless debris burning and arson. Surprisingly, lightning causes less than one percent of forest fires in Alabama.

The AFC has guidelines for landowners to use when burning debris so that you can do it safely and not cause further damage or loss to your forest.

Burn one pile of forest debris at a time and keep the piles small (less than 10 feet in diameter). The piles should contain only natural vegetation or untreated wood products. Clear the area around the burn pile of any flammable material, including grass and pine straw. Keep the burn piles at least 50 feet from structures and any forest vegetation. Only burn when the winds are calm or light. It is too windy to burn if trees are swaying, flags are extended, or waves appear on open water.

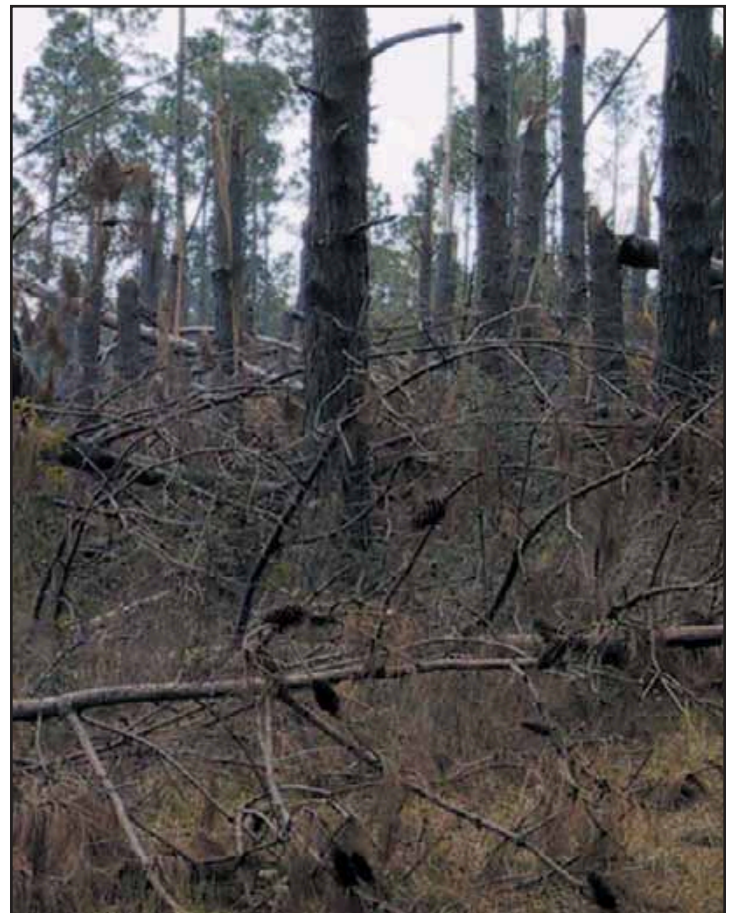
Be prepared to extinguish the fire if it becomes a nuisance. Maintain a connected water hose or at least five gallons of water and a shovel nearby. Attend the fire until it is completely extinguished. Before you burn any large debris piles or more than 1/4 acre of forestland, call the Alabama Forestry Commission for a

burn permit. The number is on the inside cover of your local phone book.

Arson, the intentional setting fire to another person's property, is hard to fully prevent. However, a landowner can do some things to reduce your risk. Maintain good relationships with your neighbors. This eliminates many causes of arson and also increases the number of people looking out for your land. The biggest deterrent to arson is having the community express displeasure at arson incidents. If the community feels that woods arson is bad, community members are less likely to set the woods on fire.

Another arson prevention technique is to reduce access to your land by outsiders. Installing gates on roads and having the main access go past the house will eliminate many arson chances.

No single technique will eliminate all risk for a wildfire on your forest, but by doing hazard mitigation and basic fire prevention you can have a better chance of protecting the TREASURE that is your Forest. 🌲



Containment obstacles - Tops and fallen trees not only hamper the tractor-plows used to build control lines around wildfires, but also cause safety problems for fire fighters.