





OPEN BURNING SAFETY

Bruce Long, Long View Fire Department

Each year, thousands of acres of American forests are damaged or destroyed by uncontrolled wildfires. Some are random acts of nature. Others are intentionally set by human hands. However, many are the result of careless open burning practices.



Forest fire on Juniper Lane in Catawba County

Many people in our area tend to think of the wildlfire phenomenon as being exclusive to the western states. Those who were in this area in the spring of 1985 know differently. The spring of '85 was particularly dry. Relative humidity levels were extremely low which led to rapid drying of light fuels such as pine needles and dead leaves. Temperatures were warm and a breeze began to blow. Conditions were perfect for rapid fire development and spread. The final piece of the puzzle came together when a careless individual decided to dispose of household trash by open burning. The ensuing fire destroyed 26 homes in central Burke County and caused over \$5 million in damage.



Long View brush engine monitors control line re-enforcement

So, let's start at the beginning. You have decided you need to burn. The first thing we need to determine is if you can indeed legally light a fire. If you are in the jurisdictional limits of a municipality, there may be local ordinances that prohibit outdoor burning. Most cities or towns that have such ordinances offer the alternative of public pick-up of tree leaves and limbs. Next, we must examine what you plan to burn. Under North Carolina law, you can only burn natural vegetation and even this has limitations. Natural vegetation includes lawn trimmings, twigs and limbs, leaves, etc. You may not burn household garbage and trash. You cannot burn processed wood, such as lumber. Violating North Carolina's Air Quality laws can result in a fine of up to \$10,000.

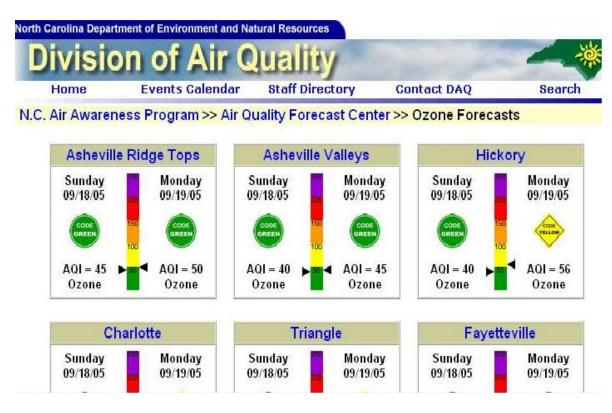
Provided that your material can be legally burned, your next step will be to obtain a North Carolina Open Burning Permit. These permits may be obtained in person at the fire department by visiting our website at www.longviewfire.org. Click on "Open Burning Permits" and scroll to the bottom of the page. Click on the North Carolina Division of Forest Resources banner and you will be redirected to their online burning permit form. Be sure you read and understand the terms and limitations associated with your permit. And, as a courtesy, please notify your local fire department to make them aware of your burn plans.



Firewhirls can lead to unexpected fire spread

Next, you will need to make sure your fire will be safe. Weather is a major factor in outdoor fire behavior. Check the forecast before you light your fire. You should be concerned with both the immediate weather as well as what conditions may be like as your fire continues to burn. This is particularly important if your burn will last more than an hour. We recommend you light fires only if surface winds are forecast to be at less than 5 mph and if the relative humidity is greater than 30%. Remember: check the fire weather forecast before you burn. Your burning permit can be invalidated by a burning ban at anytime.

Another safety consideration has to do with air quality. Under newly passed legislation, your open burning permit may be invalidated by air quality concerns. North Carolina now has Air Quality Action Days. This means if the air quality index is forecast to be within a certain range, all open burning is prohibited. To make sure you aren't burning on an Air Quality Action Day, you may visit NCDENR's Division of Air Quality forecast page at www.daq.state.nc.us/Ozone or you may call toll free, 1-888-RU4-NCAIR (1-888-784-6224). If the Ozone level is forecast to be greater than 100, you may not burn. Air quality Action Days may be initiated at anytime between April 30 and September 30 each year.



NCDENR's Ozone forecast page

As a final safety consideration, we recommend that you burn no closer than within 100 feet of any structure. Attempt to burn numerous small fires as opposed to one huge fire. Radiant heat from large fires can cause unwanted ignitions. Your fire must be started between the hours of 8am and 6pm and no additional material may be added after 6pm.

If the fire is being used to clear land, the burn area must be at least 1,000 feet from an occupied structure and at least 250 feet from the edge of any roadway, provided the prevailing wind is toward the roadway. You may use certain accelerants to start the fire. Only use kerosene distillate or diesel fuel. NEVER attempt to use gasoline to start a fire! The fire is to be started between the hours of 8am and 6pm and no additional fuel may be added after 6pm.

Once you have addressed these issues, you should prepare your burn site. To make the area safe for burning, a control line dressed down to mineral soil should be placed around the fuel. Small lines can usually be created using lawn and garden handtools while larger lines may require tractors or dozers. The same handtools and equipment used in building the control line should be kept near the burn area until the fire is out.

As you prepare the burn site, look at what is on the ground and in trees adjacent to the area. Remove anything that is not considered to be natural vegetation. Remove ladder fuels from trees. Ladder fuels are fuels that bridge the gap between the ground and tree tops. These may include low hanging limbs or vines such as kudzu. Also check the area for poison ivy and oak. Oils from these plants may be transmitted in smoke and can create serious health problems if accidentally inhaled.

Finally, you are ready to light the fire. At this point, you need to make sure you have at least one garden hose in place. It's also a good idea to have one or two five gallon buckets of water as well. Remember, once the fire is started, you must remain with it until it has been extinguished. If at any point, you feel the fire is beyond your control, immediately call 9-1-1 and request fire department assistance.

Open burning can be a safe and effective way to rid your property of unwanted vegetation. Employing a little common sense along with the tips we've offered in this article will ensure that your burn is safe and legal.