



Guidelines for Prescribed Fire Preparation

Southern Illinois Prescribed Burn Association

Revised: May 2017

Prescribed burning means that fire is only allowed in the specific area that is planned, and fire breaks should be sufficient to exclude fire from unplanned areas without relying on volunteers to contain it. High quality fire breaks contribute to the safety of the crew and help the landowner and Association meet their objectives. In many cases, regularly maintained trails make excellent fire breaks and contribute to accessibility and recreational value on your property. If you are planning to burn in the spring, fire breaks are best installed during the previous fall. If you are planning to burn in the fall, it is best to prepare your fire breaks the previous spring or summer. The following are general guidelines for constructing and maintaining fire breaks for use with Prescribed Fire.

NOTE: As a SIPBA member, it is your responsibility to contact a coordinator when your lines are prepared so that we can schedule your burn. If you need any guidance or assistance, please contact Jesse Riechman or a crew coordinator.

- Terms:
- Fire break or line* – the non-flammable boundary of the area that is to be burned.
 - Burn unit* – The area of field or forest that is to be burned.
 - Thatch* – Dry grass left in the fire break from mowing or bushhogging.
 - Snag* – Standing dead trees that may fall or ignite and throw embers.

Natural Fire Breaks

Use existing or natural fire breaks whenever possible. These may include rock bluffs, creeks, rivers, roads, or adjacent tilled fields. At times it may be worthwhile to adjust the burn unit boundary to utilize these features. Some additional line preparation may be required to improve existing features to be used as fire breaks. For example, brush and dead branches may need to be cleared out of a creek bed, or a small fire break may need to be constructed around a gap in a rock bluff.

Grass Fields

1. Tilled, plowed or disked line – The minimum width of the fire break will be twice the height of the tallest vegetation in the burn unit or 4 feet, whichever is greater. The treatment may need to be repeated until thatch in the fire break is eliminated. Sometimes a second pass in the opposite direction with the equipment is very effective.

In tall warm-season grasses, supplement the tilled line with a mowed strip inside the burn unit that is 10-30 feet wide. The grass in this mowed strip can be 10-15 inches high and will still see the benefits of fire, while keeping fire intensity to a manageable level near the line. The crew will thank you!

2. Green Strip (Wheat or Clover) – In the spring, some fields are too soggy for equipment to operate in. In this case, prepare the fire break in the fall when the ground is firm, seeding the disked or tilled soil with Wheat or Clover. The width requirements are the same as mentioned above. The resulting “green strip” will provide a good fire break for your spring burn, with no need to worry about getting equipment stuck in the spring mud.

3. Mowed line – In some cases, a fire line can be continuously maintained by a finish (lawn) mower, with a minimum amount of dry thatch left behind. The width requirements are the same, but thatch removal by rake or leaf blower may be required to form an effective fire break. NOTE: If an established path is to be used for a fire break in a field, a tilled line, green strip, or additional mowing may be required to form an effective fire break.

Forested burn units

1. Building a fire break - Use a leaf blower or rake to create a 4-5 foot wide fire break, leaving mineral soil exposed. Blow or rake around standing dead trees (snags) if they are tall enough to fall or throw embers across the line. Alternatively, snags can be cut down if it is safe to do so. In addition, blow or rake around dead logs and heavy brush within 10 feet of the line.

2. Protecting trees – Most species of mature trees will tend to survive fire. Fire will generally thin out seedlings and promote oak species. If necessary, care should be taken to remove large amounts of brush or leaves from around valuable trees to minimize fire damage.

Note: This document is meant to guide your understanding and development of fire breaks. Many other factors must be considered before beginning a prescribed burn including (but not limited to) weather, fuels, crew and equipment. In no way does this guidance guarantee the outcome of your burn. Additionally, SIPBA coordinators or crewmembers may call off a burn if conditions are deemed unsuitable, regardless of the construction of the fire breaks. Pursuant to the Illinois Prescribed Burn Act, the safety and success of your burn ultimately lies in your hands.