What is a Prescribed Burn?

A Prescribed Burn is a fire that is deliberately set in a highly skilled manner, within specific weather parameters in a defined location and with specific goals. It is conducted, heavily monitored and prepared for by multiple agencies.



What is a Prescribed Burn for?

A Prescribed Burn can have multiple purposes. Sometimes it is just used to safely remove built up vegetation that, if caught on fire accidentally, would cause a much larger, uncontrolled fire (a wildfire). Other times, it is used to promote certain species of plants and animals that are specially adapted to fire, and without it can be outcompeted by more common species. These species thrive after fire. Some examples can be seen in the diagram to the left.

Image by Jim Taylor, DCR

Anatomy of a Prescribed B

Prescribed burn managers try to find a natural firebreak, such as a creek () from which they set a down wind backfire (3). This creates the blackline (2) at which the spot-headfires (set in successive ignitions, 5, 6 and 7) will

Aren't all fires dangerous?

Yes, fire can be dangerous, but fire is also a valuable tool to manage land and has been used as such for thousands of years. A fire that is applied skillfully, is prepared for and closely managed, with a specific beginning and end can be as safe as a fire in a home firepit. The boundaries are marked in advance and prepared so that the fire will not spread beyond them, then ignitions within the area (burn unit) are applied in a manner to control and manipulate the fire safely and to meet goals. Fires crews are on hand during the entire time to monitor, manage and stop the burn when it is completed.



Image courtesy of Florida Forest Service

Fire for Diversity

What about the wildlife?!

Prescribed Burns are done with the best interest of wildlife in mind. Burns vary depending on the location and end goal and are done when there is the least risk to species in that particular habitat. Nests and dens are looked for in advance, to ensure they are avoided during the burn. Unlike a wildfire, which catches and spreads quickly, a Prescribed Burn is intentionally slower, giving wildlife time to leave the area or to burrow underground. Habitat created by fire is crucial for the survival of many state-listed species. For more info: https://www.mass.gov/news/prescribedburning-for-wildlife-an-essential-land-management-tool



Prescribed Burns have demonstrated positive effects on populations of many native species, including many species that are endangered or of special concern. From left: Eastern Whip-poor-will, Black Racer, Northern Long-eared Bat, Bobwhite Quail, Pink Sallow Moth and New England Cottontail.

DCR has been actively using Prescribed Burns within the Commonwealth to restore habitat and reduce wildfire risk. Areas of the watershed that have been identified for using Prescribed Burns include fields, heathlands, shrublands, as well as woodlands. Below are images from the Barre Heath restoration project out in Barre, MA.





For a full description of the Barre Heath Restoration Project, please go to: Barre Heath Restoration Project (arcgis.com)



www.mass.gov/dcr/watershed