Prescribed Fire

Use of Controlled Burns on DCNR Lands

3/2026

Fire in Forests & Parks

The Department of Conservation and Natural Resources (DCNR) utilizes prescribed fire as a management tool on state forest and state park lands to achieve specific land management objectives.

Prescribed fires are conducted by trained personnel in accordance with written burn plans. A burn plan must be approved by a technical reviewer qualified as a burn boss before being finalized for implementation.

While prescribed fires can be conducted any time of year the conditions allow, most occur in the spring. There is also a small window in late summer and fall, just after leaf drop, when a burn may occur.

More Information

Division of Forest Fire Protection
400 Market Street, 6th Floor
Harrisburg, PA 17105
717-787-2925

bit.ly/BOFPrescribedFire

Pennsylvania
Department of Conservation and Natural Resources

Not All Fire Is Bad

A **wildfire** is an unplanned, unwanted fire that can be difficult to control and may threaten nearby homes and communities.

A **prescribed fire**, also called a prescribed burn, or controlled burn, is the planned application of fire by trained professionals who use weather conditions, topography, fuel types, and equipment to influence how the fire behaves in compliance with a written burn plan.

This distinction is important because the environmental conditions that foster wildfires are often the same ones suitable for conducting a prescribed fire. The difference is fire being applied in a controlled manner under the supervision of trained personnel in an area that has been prepared in advance.

The Benefits of Prescribed Fire

Historically, fire on the landscape occurred naturally and maintained the health of fire-adapted ecosystems through periodic disturbance. Today, prescribed fires mimic those natural occurrences under controlled conditions. Fire can be utilized as a land management tool to restore and maintain the resilience and diversity of disturbance-dependent ecosystems and fire-adapted plant communities.

Promote Forest Regeneration

Fire can help maintain healthy forest and native plant communities by consuming thick layers of organic material on the forest floor that are a barrier to seedling growth.

Enhance Wildlife Habitat

Fire can create and maintain a patchwork mosaic of habitats that support a greater diversity of wildlife needs for travel, feeding, nesting, and cover.

Reduce Undesirable Species

Fire can help control invasive plant species and reduce the need for herbicides.

Improve Soil Conditions

Fire releases nutrients in dead plant tissues, making them more available and increasing site productivity.

Decrease Risk of Wildfires

Periodic fire on the landscape reduces excess fuel buildup that can lead to intense and damaging wildfires.

Prescribed Fire Starts With a Plan

Pre-Burn Planning

Data is collected from the intended burn site and land management objectives are established that form the foundation of the burn plan. A land manager develops a prescription based on weather, fuels, wind, topography, potential smoke, and anticipated fire behavior. The burn plan includes a list of qualified crew, equipment and other resources needed to safely implement the burn.

Site Preparation

The burn site is prepared and control lines are established around the perimeter. Potential hazards are identified or mitigated.

Day of Burn: Go or No Go?

A crew briefing covers assignments and logistics for the day. A "go or no go" checklist is completed that acknowledges all burn plan elements have been met. Next, a test fire is lit to determine if fuel and weather conditions allow for a safe and effective burn. If it is a no go, the test fire is extinguished and the burn is shut down. If it is a go, the burn is implemented according to the burn plan.

Holding

As the burn gets underway, crews patrol the perimeter to monitor and hold the fire within control lines.

Evaluation

An after action review is held with the crew when the burn is complete to assess effectiveness of the day's operation and discuss any problems, successes, or improvements for future burns. The area is monitored until it is completely out.

Post-Burn Analysis

Data is collected and evaluated to determine if plan objectives were met. The results help plan strategies for future burns.

Use of Prescribed Fire on Private Lands

Pennsylvania Act 17 of 2009, known as the Prescribed Burning Practices Act, regulates the use of prescribed fire in Pennsylvania and designates a set of standards for its use on public and private lands. **All prescribed fires conducted in Pennsylvania must follow the current standards** in order to be covered under the liability, civil, and criminal protection afforded under the act.

A few key requirements to note:

- A burn plan that addresses the 23 elements required in the standards must be submitted
- Prescribed fires are to be conducted by qualified personnel
- DCNR and the Department of Environmental Protection (DEP) must both be notified prior to initiating a burn

A program introduced in 2024 focuses on increasing the use of prescribed fire on private lands. The Pennsylvania Certified Prescribed Burn Manager program creates a pathway for private landowners and consultants to become certified burn managers (CBM) in order to conduct low complexity burns.

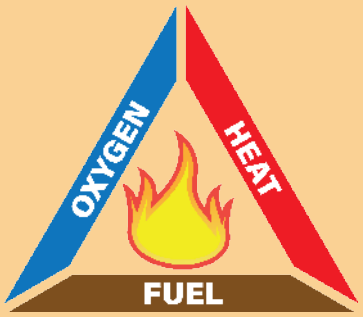
For more information on the current standards and CBM program, visit the PA Prescribed Fire Council website. https://paprescribedfire.org

The Science of Fire

Fire can be managed by applying knowledge of how a fire starts and spreads.

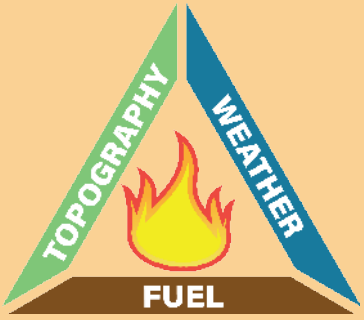
Fighting wildfires and planning a prescribed fire are both based on these concepts:

The Fire Triangle



Fire comes to life when **heat**, **oxygen**, and **fuel** combine. If any of these elements are removed, the reaction is interrupted and the fire goes out. A fire can be stopped from spreading by digging a line around a fire (removing **fuel**), spraying flames and hot spots with water (removing **heat**), or smothering flames (removing **oxygen**).

Fire Behavior Triangle



A fire's intensity and rate of spread is influenced by:

- **Topography** - shape and steepness of the land
- **Weather** - temperature, relative humidity, precipitation, atmospheric stability and wind
- **Fuel** - dryness, size, arrangement, and type of combustible fuels available