

Restoring the Natural Role of Fire



Fire has been an essential natural process in Appalachian oak and pine forests for thousands of years. Lightning caused some fires, and Native Americans intentionally set others. Fires opened the forest understory, which increased plant diversity, improved browse for wildlife and made travelling easier. Early European settlers continued to use fire as a tool to shape their surroundings.



Acorns, blueberries and blackberries are important food sources for white-tailed deer, wild turkeys, black bears, songbirds and many other wildlife species. Fire increases fruit production in some plants and helps improve seed germination for others.



Teams of skilled fire experts are using controlled burns to safely reintroduce fire to these forests. Burns take place only when the weather conditions are best to control smoke, manage fire behavior and ensure the safety of the fire team, nearby residents and private property.



Fire removes some or all of the thick layers of leaf litter that can inhibit the germination of native grasses and wildflowers. A series of controlled burns can thin crowded forests, resulting in less severe disease and insect pest outbreaks.

Bringing Fire Back to the Mountains



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Oak and yellow pine trees have thick bark and many other adaptations that allow them to survive controlled burns. Table mountain pines, for example, have cones coated with a resin, which melts with the heat of a fire and allows the cones to open and release their seeds.



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Researchers studying fire-scarred trees have found that fires occurred periodically, often every 3-9 years, dating back to at least the mid-1600s. Soil charcoal records show fire has been a part of these mountains for over 10,000 years.



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The Central Appalachians Fire Learning Network engages federal, state and private land management agencies, academic institutions, and non-profit organizations in a collaborative effort to enhance capacity to implement ecological fire management. Partners in Virginia and West Virginia include: USDA Forest Service, The Nature Conservancy, Virginia Department of Conservation and Recreation, Virginia Department of Forestry, Virginia Department of Game and Inland Fisheries, Virginia Department of Corrections, West Virginia Department of Forestry, West Virginia Department of Natural Resources, National Park Service, U.S. Fish & Wildlife Service, National Weather Service, Arcadia University, West Virginia University, U.S. Geological Survey, Radford University and Virginia Tech.

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This institution is an equal opportunity provider.



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Teams of skilled fire experts are using controlled burns to safely reintroduce fire to these grasslands and the surrounding forests. Burns take place only when the weather conditions are best to control smoke, manage fire behavior and ensure the safety of the fire team, nearby residents and private property.



Controlled burns conducted every 1-3 years produce a diverse mixture of native grasses and forbs, providing food and cover for ground-nesting birds, white-tailed deer, reptiles, and small mammals. Burns conducted less frequently, every 3-7 years, allow more blackberries, shrubs, and small trees to grow up and provide critical habitat for declining species such as golden-winged warbler.



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