



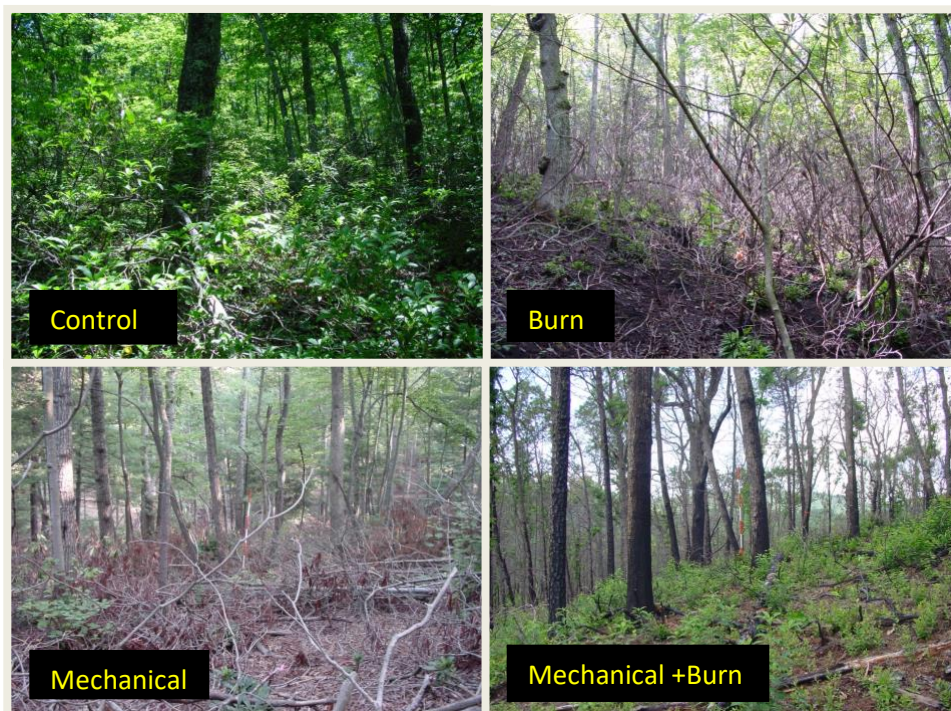
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Volume 9 Issue 2

## REPEATED BURNING STIMULATES OAK REGENERATION IN WESTERN NC FORESTS

In a paper just published in the journal *Forests*, Clemson University authors Emily Oakman, Donald Hagan, Thomas Waldrop, and Kyle Barrett report on the 15-year effects of mechanical fuel reduction, repeated prescribed burns, and mechanical plus burning on tree regeneration and other understory vegetation, in western North Carolina oak forests. This research site, located on the Green River Game Land (NC Wildlife Resources Commission), was established in 2001 as part of the national Fire and Fire Surrogates (FFS) Study, funded by the Joint Fire Science Program.

The mechanical treatment in 2001 focused on shrubs and saplings 6 feet tall to 4 inches diameter by chainsaw felling and leaving in place; mountain laurel (*Kalmia latifolia*) was dominant in this layer. Dormant season burns were in 2003, 2006, 2012, and 2015. The mechanical treatment was repeated in 2012 in the mechanical only stands. In 2016 understory vegetation data were collected by the team and in this paper, they compare changes in the abundance several plant groups from 2001-2016.



## Key Findings

- **Oaks:** Oak seedling densities increased much more in the burn (B) and mechanical+burn (MB) stands compared to the mechanical only (M) and untreated control stands. By 2016, there were >10,000 oak seedlings per acre on the burn units. Larger oaks (>1.5 ft tall) were most abundant in the MB stands. The establishment of new oaks (especially white oaks) during heavy mast years, appears to have been greater in the burned (B, MB) stands. An increase in mesic hardwoods (primarily red maple) was greatest in the burn only stands.
- **Mountain laurel and Rhododendron:** The cover of these ericaceous shrubs increased significantly on the mechanical only treatment, due to prolific sprouting. Repeated top-killing limited their abundance in the burned stands.
- **Herbaceous plants:** The cover of graminoids (grasses and sedges) increased in the MB stands but cover remained low (<5%). The cover of forbs also stayed relatively low and did not differ among treatments. The authors suggest that the lack of herbaceous response was related to a limited seedbank and heavy competition from hardwood regeneration and shrubs.



### The Deadline to Submit a Workshop Session or Presentation Proposal is Monday, July 1st!!

The International Association of Wildland Fire in partnership with the Wildland Fire Leadership Council (WFLC) and National Cohesive Wildland Fire Management Strategy Regions, invites you to submit a proposal for a workshop session or interactive presentation at the 3rd Annual National Cohesive Wildland Fire Management Strategy Workshop to be held October 21-24, 2019 in Plymouth, MA.

[www.iawfonline.org/event/2019\\_cohesive\\_strategy\\_workshop/](http://www.iawfonline.org/event/2019_cohesive_strategy_workshop/)



# 6th Fire in Eastern Oak Forests Conference

**When:** July 23 to 25, 2019

**Where:** Penn Stater Hotel and Conference Center, State College, Pennsylvania

**Website:** <https://cvent.me/QB0gQ>

The Fire in Eastern Oak Forests Conference is a major conference focused on fire in oak forests, woodlands and savannas where noted experts in research and management gather to present state-of-the-art information, perspectives and synthesis on key issues. This conference will emphasize topics relevant to management of oak-dominated forests, woodlands, and savannas and will be of interest to managers, scientists, landowners, consultants, and students.

The theme of this conference is “Laying Out a Restoration Road Map”. This conference is particularly tailored to land managers and applications. The conference will feature 17 invited presentations, an open poster session, management focused panel discussions, exhibits, and professional networking opportunities. The schedule will include a day of speakers and panel discussions, a field trip day, followed by a final day of speakers and panel discussions. Continuing Education Credits will be offered through the Society of American Foresters and The Wildlife Society.

See the website for more information.

## **Conference sessions:**

- Fire and culture
- Building capacity
- Expanding the burn window
- Fire effects on flora
- Fire effects on wildlife

## **Call for research and management posters:**

Abstracts for posters may be submitted by May 1st on any aspect of fire in eastern North American oak ecosystems. Research posters may relate to any aspect of fire science such as fire regimes, fire effects, fuels, GIS/remote sensing, hydrology, soils, wildlife, or human dimensions. Management posters may highlight specific fire-related projects and / or programs. Manuscripts from selected posters will be considered for a special collection of papers published in the journal Fire Ecology. Please see the conference website for submission instructions and deadlines.

## **Key sponsors and supporters of this conference include:**

Oak Woodlands & Forests Fire Consortium, Consortium of Appalachian Fire Managers and Scientists, Joint Fire Science Program, Pennsylvania Prescribed Fire Council, Ruffed Grouse Society, USDA Forest Service Northern Research Station

# Save the Date

What: Fire and Fuels Monitoring Workshop

When: October 7-10, 2019

Where: Allegheny National Forest Supervisors Office - Warren, PA

## Communicate With Us!

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Find us on twitter @APfirescience or find us on Facebook by searching Consortium of Appalachian Fire Managers and Scientists.

## Join CAFMS:

The consortium is for all land managers and researchers in the region who deal with any aspect of fire. To join, simply provide us with some contact information at the web site listed below.

[www.appalachianfire.org](http://www.appalachianfire.org)

Helen Mohr [helen@cafms.org](mailto:helen@cafms.org)

Jen Bunty [jen@cafms.org](mailto:jen@cafms.org)

