

Ecological Effects of Prescribed Fire Season: A Literature Review and Synthesis for Managers.

The authors have done what we never have time to do - read a bunch of research papers and synthesize the results.

Both southern pine and interior hardwoods are discussed in Chapter 5: Eastern Region.

Also see Chapters 1 and 2: Overview and Introduction.

Each chapter has a **Key Points** section if you don't have time to read the whole thing.

Also remember that I have about 800 articles on eastern fire ecology and history, and will help you find the correct supporting research for your forest or forest type.

Key Points—Eastern Region

- There is little evidence that mortality or growth of southern pines differs after growing- or dormant-season prescribed burns.
- Phenology does influence the response of midstory hardwoods in pine forests, with early-growing-season (May) burns (coupled with short fire-return intervals) more likely to control or kill these species than dormant-season burns. The result of early-growing-season burns is often an understory with greater cover of grasses and forbs.
- Burning season has little effect on growth and mortality of overstory oak species, but higher intensity fire (in whatever season fuels are sufficiently dry to burn at higher intensity) likely favors oaks over the long term, by killing competing mesophytic species such as yellow poplar or maple.
- Although some understory plant species respond positively to fire in the growing season and others respond positively to fire in the dormant season, the majority do not appear to be significantly affected by burning season.
- Few strong direct impacts to wildlife from prescribed fire in any season have been documented; effects, both positive and negative, appear to be mostly indirect, and primarily the result of fire-season-specific habitat changes.
- Whether the ecosystem is burned or not (fire frequency) appears to play a stronger role in the response of most species than the relatively minor effect caused by different burning seasons.
- Differences in fire effects among species suggests that a variable fire regime, including a mix of growing and dormant-season burns and different burn intensities may maximize biodiversity.

All, you might check out the complete document, and forward it to your botanists, biologists and planners, as well:

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