

# Forest managers hindered in efforts to use prescribed burns to control costly wildfires

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Forest managers would prefer to use prescribed burns every few years to help prevent costly wildfires and rebuild unhealthy ecosystems, but hurdles like staffing, budget, liability and new development hinder them, a new University of Florida study shows.

Fighting wildfires is costly. The U.S. government now spends about \$2 billion a year just to stop them, according to the National Interagency Fire Center. That's up from \$239 million in 1985.

Leda Kobziar, an associate professor of fire science and forest conservation in UF's School of Forest Resources and Conservation, led a web-based survey of 523 public and private land managers across Region 8 of the U.S. Forest Service, which consists of 13 Southern states, including Florida. She and her colleagues wanted to see whether front-line experts think [prescribed burns](#) prevent wildfires and maintain vegetation and healthy ecosystems. And if they do, what are the circumstances under which such burns work best.

As it turns out, prescribed burns should be done every few years to prevent wildfires or reduce their severity, depending on weather and the type of ecosystem land managers are trying to protect, according to the survey.

"Although managers reported increases in prescribed fire use in the South over the last decade, these increases have attenuated in the last five years," Kobziar said. Public land managers said burning can be

limited by staffing and budget, while private land managers were more concerned about liability. "Even though prescribed burns cannot prevent all wildfires, survey respondents agree that regular burning helps reduce wildfire intensity and severity, and therefore cuts costs and risks for firefighters and the public."

According to the survey, prescribed burns are conducted to restore unhealthy ecosystems. A beneficial prescribed burn can minimize flammable materials and the spread of pest insects and disease. It can also improve habitat for threatened and endangered species, recycle nutrients back to the soil and promote vegetation growth.

As time passes, prescribed burns lose their effectiveness, according to the UF study. If [forest managers](#) wait five years or more between prescribed burns, only 10 percent said they saw reductions in wildfire in pine forests.

But forest managers can't do prescribed burns as often as they'd like because of constraints such as weather and smoke management, said Kobziar, an Institute of Food and Agricultural Sciences faculty member. Another hurdle is the proximity of commercial and residential areas to forests.

Private forest managers cite liability as an impediment to more prescribed burns. Although many Southern states offer strong liability protection for burn managers, private landowners remain concerned about potential costs of smoke-related incidents. Although less than .01 percent of prescribed fires escape, such concerns force private contractors to purchase prescribed burning insurance, which can cost \$1,000 to \$10,000 annually, or up to \$700 per burn Kobziar said.

Still, given the critical nature of [prescribed burning](#) for maintaining fire-adapted ecosystems across the South, the benefits outweigh the costs,

according to survey responses. As one manager said, "Prescribed burning is the most important forest management tool we have."

Kobziar tries to help fire managers use prescribed [burns](#) through the Southern Fire Exchange, [www.Southernfireexchange.org](http://www.Southernfireexchange.org). The portal includes resources to help [land managers](#) predict, and thereby better manage, potential smoke impacts, she said.

Kobziar's study is published online in the journal *Forests*.

Provided by University of Florida

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