

# ECONOMIC BENEFITS OF WILDFIRE PREVENTION EDUCATION\*

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From mid-2002 to mid-2007, the State of Florida spent an average of \$500,000 annually on fire prevention education to reduce four main types of fires ignited by humans:

1. debris-burning escapes,
2. campfire escapes,
3. children playing with fire, and
4. wildfires associated with smoking materials.

## Cost Savings From Fire Prevention

During that period of time, these four types of fire represented 36 percent of all wildfires and 9 percent of all acres burned in Florida (fig. 1). Prestemon and others (2010)

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\* Adapted from L.A. Hermansen-Báez, J.P. Prestemon, D.T. Butry, K.L. Abt, and S. Ronda, *Economic Benefits From Wildfire Prevention Education: Fact Sheet* (Asheville, NC: Southern Research Station, 2011).

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Any additional dollar spent on fire prevention education in Florida would have a benefit-to-cost ratio of 35 to 1.

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found that by reducing accidentally ignited wildfires, Florida and its residents avoided the associated costs of firefighting and economic losses, such as property damage, timber loss, large-scale evacuations, and medical expenditures (for example, from issues associated with smoke inhalation).

The study indicated that additional increases in fire prevention education would be beneficial. Specifically, if it had been possible to increase spending on fire prevention education from 2002 to 2007, then any additional dollar spent on fire prevention education in Florida would have reduced fire-related losses and suppression costs by \$35, for a benefit-to-cost ratio of 35:1. (This ratio might not be applicable to other States and prevention programs because of differences in fire regimes, values at risk, and suppression costs.)

## What Activities Work Best?

Activities for fire prevention education come in many forms, such as media efforts, homeowner visits, informational brochures and flyers, and presentations. The study found that media efforts, such as

television and radio public service announcements, were the most successful fire prevention activities, followed by presentations to schools and homeowner associations. In addition, some of the costs of public service announcements through local broadcast and print media were paid for by media organizations, reducing overall costs for land managers.

## Timing and Location Matter

Conducting fire prevention activities just before and during the most active parts of the fire season might improve their effectiveness. If fire prevention education in Florida were emphasized during winter (such as in January and February), before the peak of fire season, and continued through the main fire season in spring (March through May), then the economic benefits of fire prevention and awareness would significantly rise (Butry and others 2010a). Specifically, if prevention activities could have been increased during the winter months in Florida from 2002 to 2007, then \$3.9 million would have been saved from economic losses and avoided firefighting expenditures.