

SAFETY IMPLICATIONS FOR FIREFIGHTERS AND HOMEOWNERS IN THE WILDLAND–URBAN INTERFACE

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ABSTRACT

There are few aspects of wildland fire that attract the public and media attention as does fire in the wildland–urban interface. A relatively new phenomenon in the United States, these fires now burn or damage hundreds of homes each year from Florida to Alaska. While there is a valid concern in these fires about the destruction of homes and personal property, a more pressing concern deals with the safety of both homeowners and firefighters when an interface fire occurs.

This paper addresses the safety issues inherent in wildland–urban interface fires—locating rural homes; the emergency evacuation of residents; access into and egress out of the fire area; special hazards involved in fighting interface hazards such as stored chemicals, propane tanks, and power and gas transmission lines; staying in place versus evacuating—and offer potential solutions to those safety issues discussed.

Throughout the paper, safety issues will be related to real-world examples from the 1990s of wildland–urban interface fires that resulted in injury or death to both firefighters and civilian homeowners. Fires from the temperate areas of Florida in 1998 to the Millers Reach Fire in the boreal forest area north of Fairbanks, Alaska, will show the widespread potential of these fires to affect firefighter and homeowner safety across all the North American ecosystems. Special emphasis will be placed on the tenth anniversary of the Oakland Hills, California, fire in October 1991 when 20+ civilian homeowners died in one afternoon in a rapidly moving wildland–urban interface fire.

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