

## **PREFACE**

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Each summer, California has thousands of acres of land burn causing millions of dollars in damage. The most destructive fires are the ones that stand out to most people: Thomas Fire (2017), Carr Fire (2018), Camp Fire (2018) and the recent 2020 Lightning Fires across the north state. However, each year hundreds of other fires ignite due to natural or human causes, but can be extinguished quickly due to the fuel conditions. This is where homeowners and land managers fit in, playing a role in reducing fire fuels and hardening your homes to withstand wildland fire exposure. This book created by University of California Cooperative Extension outlines tips to reduce fire fuels through managed livestock grazing, fire preparedness, and home hardening. The booklet also provides technical resources and case studies that can help you determine and implement fire prevention activities on your own property.

Fire behavior is directly linked to three factors: topography, weather conditions and fuels profile (vegetation). We can't change the first two factors, but through livestock grazing, fuels treatments, and prescribed fire, we can alter fuels profiles to reduce the threat of small or catastrophic fires. The continuity of fuels across a landscape (horizontally) and ladder fuels that connect understory vegetation to trees (vertically) can be altered to reduce fire intensity and threat of fire spread.

Managed livestock grazing with goats, sheep, and cattle is one tool homeowners, land managers, communities and public agencies can utilize to reduce fire fuel loads that can lead to catastrophic fires. Myself and other firefighters value livestock grazers to reduce the severity, continuity, and size of wildfires. When firefighters look at a landscape that has been grazed, we can see a decrease in the amount of fuels that is available to ignite from a spot fire and the threat of spread is significantly reduced because there is little accumulation, continuity, or height. Livestock grazing will not prevent fires; it changes fire behavior, creating an opportunity for firefighters to attack the fire before it becomes bigger, hotter and faster due to fuel accumulation. The accumulation of fuels often occurs where there has been lack of management or long-term exclusion of livestock grazing, allowing multiple years of plant growth that creates a hazardous condition when in the path of a fire.

California's wildfires have been growing in intensity, scope, and size with thousands of acres of expansive open spaces burning each year in the state. There is growing interest in actively working to create a more fire-resilient landscape. The resources in this booklet can help you take an active part in creating a more fire resilient landscape protecting homes, businesses, communities, and natural resources.