Public Perceptions of Fuel Management Strategies

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In the U.S., large numbers of people are moving into rural areas that have a high fire hazard. This increases the risk of fire damage to both lives and property and complicates fire management before, during, and after a wildfire. In order to respond effectively to public concerns and communicate wildland fire information to the general public, resource managers need to understand how people perceive wildland fire and fire management.

A mechanical thinning feller/buncher. Photo from: http://data2.itc.nps.gov/fire/news/firenews.cfm?postid=296

This study compared perceptions of two fire management techniques, prescribed burning and mechanical thinning among residents of three different areas: the Colorado Front Range, metropolitan Chicago, and southern Illinois. The study also explored the relative impacts of several factors on public acceptability of prescribed burning, mechanical thinning, and no treatment. These factors included forest location (rural versus wildland-urban interface); primary use of the forest (recreation versus commercial); fire history in the forest (incidence of recent fire); and current conditions of the forest (susceptibility to fire).

One overarching finding was that people who lived in different places shared many of the same opinions and perceptions of fire management. For example, study participants from the Colorado Front Range, the Chicago region, and southern Illinois all agreed that fires impacting only natural resources should be allowed to burn. No matter where they were from, people were also split evenly on whether or not fires impacting recreation and scenery should be allowed to burn. Respondents overwhelmingly agreed that homeowners near the wildland-urban interface should assume much of the responsibility for protecting their homes, and accorded less responsibility to the government.

Most people felt generally positive toward both prescribed burning and mechanical thinning with slightly stronger support for both techniques in the Colorado Front Range. Most respondents also supported artificial manipulation of forests for fire management and trusted land management agencies to carry this out. This is notable because the study found that **the most important factor influencing attitudes toward both prescribed burning and mechanical thinning was trust in the relevant agency to manage wildland fire.**

The existing condition of a forest strongly affected respondents' perceptions of fire management techniques. Doing nothing in an area was acceptable primarily if current conditions suggested that no wildland fire was imminent. If a wildfire seemed likely in a given season, support for prescribed burning and mechanical thinning increased. Prescribed burning was also more acceptable if the forest in question was in a rural, remote area as opposed to a more built-up rural area. Conversely, mechanical thinning was more likely to be acceptable in the wildland-urban interface than in a rural area.

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