

# Fuel Treatment Performance and Fire Hazard Reduction





# Fuel Treatments: Opening Remarks

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One person most often quoted (ironically by both sides) in the ecowars of land management policy on federal lands is Aldo Leopold. His classic book on wildlife management was the text for the undergraduate Wildlife Management class at CSU many years ago and sits on many office bookshelves. In it he examined the habitat needs of various upland game species and concluded that many of these animals and birds thrive where there is an abundance of what he termed “edge,” where a variety of habitat conditions were available. In today’s parlance, we might refer to that as “habitat diversity.” Different species of plants and animals require different conditions with no single condition being optimal for all. Therefore, a variety of conditions within a landscape are likely to benefit most flora and fauna occurring within it. Such diversity is also beneficial for *processes* that are active within a landscape. If we take the next step and refer to landscapes containing flora, fauna, and processes as *ecosystems*, we might also refer to those containing sufficient diversity as being in a “properly functioning condition.”

Regardless of the term, the thought behind the idea is every bit as valid today as when Leopold observed it – too much of any one condition in an ecosystem is not good. It is as true for plants as it is for animals in an ecosystem. And, it is also true for the disturbance processes that affect ecosystems, including fire. The key for providing for all components of an ecosystem is to maximize diversity – to make room for all. Exactly how we do that on the ground will depend upon the particular ecosystem we are dealing with, the particular mix of conditions that currently exist within it, and the particular species or process of concern. No one approach is ever likely to fit all circumstances. Remembering this will be helpful to readers of this section as we learn in the following papers about various approaches that have been used to reduce the risk of unacceptable fire in forest ecosystems. No single technique is likely to be perfect for all situations. Just as he said when he advised us to “save all of the pieces” when tinkering with ecosystems, Aldo Leopold would likely also advise us to “bring more than one wrench” to do the job. So, let’s see what’s in the tool kit!

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