
ARE MONTANA'S SEVERE WILDFIRES CATASTROPHIC OR NATURAL EVENTS?

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Many scientists and forest land managers concur that past fire suppression, grazing, and timber harvesting practices have created unnatural and unhealthy conditions in the dry, ponderosa pine forests of the West. Specifically, such forests are said to carry higher fuel loads and experience fires that are more severe than those that occurred historically. It is unclear, however, how far these generalizations can be extrapolated to other forest systems. Insight into historical forest conditions can be gained through careful consideration of the ecology of plant and animal species that could be considered fire specialists. In western Montana there is one bird species (Black-backed Woodpecker [*Picoides arcticus*]) that is so specialized on exploiting the abundance of beetle larvae in severely burned forests that it is nearly restricted in its habitat distribution to such conditions. This distribution pattern has profound implications because it brings into question the hypothesis that the severe fires we see burning in many, if not most, western forests are “unnatural” or “unhealthy” and suggests instead that severely burned forest conditions across a broad range of forest types must have occurred naturally for millennia. These findings highlight the fact that there are ecological benefits associated with severe fire and suggest that the presence and importance of severe fire may be much broader than what has been assumed on the basis of historical fire-scar studies.