The Dilemma of Wilderness Fire

l J. Parsons

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The restoration of fire as a natural ecological process poses a significant challenge to wilderness managers. Following nearly a century of efforts to eliminate fire, it is now widely recognized that fire plays an essential role in the evolution of many natural ecosystems, and fire suppression eliminates one of the most important factors influencing wilderness. The restoration and maintenance of fire as a natural process is essential to the long term preservation of wilderness ecosystems. However, despite widespread recognition of the importance of restoring natural fire to wilderness, suppression continues to dominate most wilderness fire programs. The failure to restore natural fire to most wilderness areas poses a dilemma for wilderness advocates and managers.

Recognition of the detrimental effects of fire suppression led to establishment of the first natural fire management program by the National Park Service in 1968 when two lightning-ignited fires were permitted to burn in Kings Canyon National Park. By 1988 natural fire programs were in existence in 26 national parks and 50 Forest Service wilderness areas. However, the 1988 Yellowstone fires (over 3.7 million acres burned throughout the western United States) brought an immediate halt to wilderness fire programs. Since 1990, natural fire management programs have been gradually re-established in many national park and Forest Service wildernesses. However, new guidelines to reduce the risk of potential wildfire escape have severely restricted the number and size of fires allowed to burn.

Even remote fires are routinely suppressed.

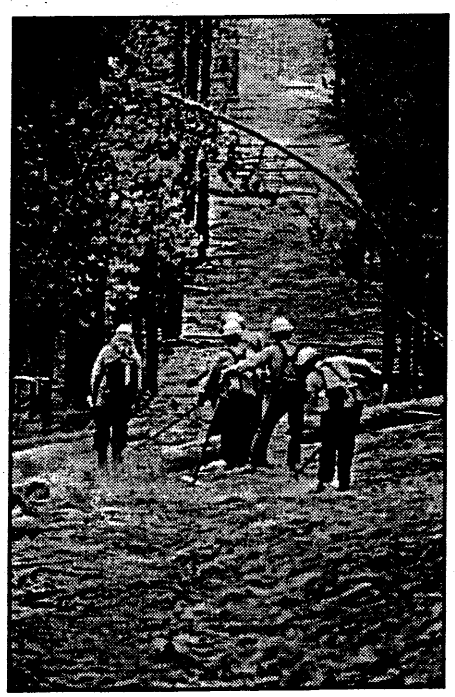
Although management policies of all four federal wilderness management agencies recognize the importance of fire as a natural force in wilderness, most wilderness areas have no provision for permitting natural ignitions to burn.

Regardless of one's perspective on the appropriateness of prescribed burning in wilderness, the cost and resource constraints prohibit its use on the scale that would be required to restore fire to most wilderness acreage.

At the beginning of the 1998 fire season, only 58 of 398 Forest Service wildernesses had approved fire management plans that permitted natural ignitions to burn. Twenty six national parks (including 17 of the 36 parks with designated wilderness in the lower 48) had plans permitting the use of natural fire. The average number of natural ignitions allowed to burn and the acreage burned per year in national parks in the 1990's has been less than 50% of that prior to 1988. Average fire size is only about a fourth of that prior to 1988. Whereas six of 131 Bureau of Land Management wilderness areas have management plans allowing the use of natural ignitions, the BLM has yet to allow a natural ignition to burn. The Fish and Wildlife Service, although supporting a limited suppression policy in Alaska, has yet to recognize the need for permitting lightning fires to burn in the lower 48.

As an alternative to permitting natural ignitions to burn, the use of prescribed burning (management ignited fires) in wilderness has been increasingly utilized by the BLM, National Park Service, and Fish and Wildlife Service to reduce unnatural fuels, simulate the effects of natural fire, or to accomplish specific management objectives (such as habitat improvement). Despite opposition from many wilderness

advocates to prescribed burning as an inappropriate intrusion, it continues to be used by these agencies. The Forest Service has generally not permitted the use of prescribed burning in wilderness except in limited cases where necessary to reduce unnatural fuel accumulations. The seriousness with which this prohibition is taken was recently demonstrated when significant suppression efforts were taken on a 1,700 acre prescribed burn on the Bitterroot National Forest in Montana as it spread upslope into the largely snow covered Selway-Bitterroot Wilderness. In 1995, the national forests in Florida were granted authority by the Chief of the Forest Service to use management ignited fires in wilderness to accomplish wilderness objectives, including burning "to mimic pre-settlement lightning ignitions in order to let the natural processes occur." Although, to date, no other national forests have been granted such an exception a number of areas are considering proposals for the use of management ignitions in wilderness as substitutes for lightning fires that can not be allowed to burn. Regardless of one's perspective on the appropriateness of prescribed burning in wilderness, the cost and resource constraints prohibit its use on the scale that would be required to restore fire to most wilderness acreage.



Many fire control tactics can leave lasting scars on wildlands.

The fact that the majority of wilderness areas managed by all four wilderness agencies continue to be managed under a policy dominated by (if not exclusively) fire suppression indicates that the vast majority of natural ignitions in United States wilderness continue to be suppressed. Efforts to restore natural fire to wilderness must be dramatically increased if wilderness ecosystems are to be sustained in anything close to their natural state. A failure to accomplish this can be expected to result in shifts in successional patterns, disruption of co-evolved species associations and unprecedented fuel accumulations. Ultimately, increasing occurrences of large, uniformly intense wildfires that threaten non-wilderness resources can be expected.

What are the options? If administrative constraints continue to limit the use of natural ignitions there are a limited number of viable options for most wilderness areas. These include a continued emphasis on suppression, expanded use of management ignitions, or use of some sort of fire surrogate - the most often suggested being various forms of mechanical thinning or harvesting. Since none of these are desirable, or to many, even acceptable in wilderness, it is clear that we face a significant dilemma in the future management of wilderness fire. If a way is not found to increase the use of natural ignitions (including mitigation of concerns over air quality impacts, threat of escape, and even questions of bureaucratic responsibility) we are faced with one or more of the above options. It is time that this dilemma be acknowledged and the options and consequences of the various choices be addressed.

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PS: A recent change in federal terminology has eliminated the use of all terms other than prescribed fire (management ignitions) and wildland fire (which can either be suppressed or managed for resource benefits). It is unclear what the effect of classifying all natural ignitions as wildland fires will have on the ability to allow such fires to burn under certain conditions.

— David J. Parsons is Director of the Aldo Leopold Wilderness Research Institute in Missoula, Montana.