

Viewpoint: Fuels Management—Is Livestock Grazing the Solution

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As a result of the severe and tragic fires of 1994, researchers, managers, and concerned citizens have developed an increased awareness of the sometimes catastrophic nature of wildfires. This has initiated a renewed effort to intelligently manage fuels in order to minimize the risk of large, uncontrolled wildfires. Recently, articles have appeared in the popular press, the print media, and in our own *Trailboss News*, describing the value of livestock grazing for reducing fine fuels and thereby decreasing fire frequency. There is no question that livestock grazing is an important tool for controlling wildfires, however, we must be careful not to ignore the long-term, ecosystem scale dynamics of fire and herbivory.

Fire has long been a dominant force on many western rangeland ecosystems. The combination of fire suppression and the removal of fine fuels by livestock grazing has decreased the occurrence of fire on many rangeland ecosystems in some cases, fire has been virtually eliminated. This has caused a dramatic shift in the botanical composition of many of these areas. In the absence of fire and with the presence of livestock grazing, woody vegetation has become dominant on such landscapes—the sagebrush-grass and juniper-pinyon ecosystem types are two prime examples. Due to fire exclusion, many of these areas exhibit low species diversity and poor watershed conditions. In order to restore these landscapes to a higher ecological status, a prescribed fire program is essential (chemical and mechanical methods are also alternatives). Acknowledging the fact that a great deal of these changes were initiated by unrestricted livestock grazing near the turn of the century, if we continue to apply widespread grazing to these ecosystems without some corresponding degree of prescribed burning, the process continues. The result is more and more rangeland moving into a woody dominated state—quite simply, we lose ground. In some instances, this process can increase the potential for uncontrollable, catastrophic wildfires. Incidentally, the implication that fire and grazing have similar effects because both influences remove the standing herbaceous crop, is inaccurate. Ecosystems respond differently from fire than they do from grazing.

Restoring the sustainable productivity of these ecosystems depends, in part, on our ability to mimic the naturally occurring disturbance regimes (fire) under which they evolved. As livestock grazing continues, the likelihood of

wildfires occurring on these landscapes is reduced and we must rely on very aggressive prescribed burning projects to achieve this objective.

To focus on livestock grazing as a solution to the problem of catastrophic wildfires ignores the broader, long-term ecological dynamics involved and subtly implies that fire is, once again, the “boogie man.” All wildfires do not have deleterious ecological effects—they are difficult to control and some have catastrophic effects on ecosystems and humans, yet some also achieve favorable ecological results. With the issue of range management becoming a topic of increasing concern, we must be careful to communicate consistent and accurate information to the public. We cannot afford to send mixed messages that may lead some people to believe that heavy livestock grazing everywhere is good because the paramount benefit is fire prevention.

We have created unnaturally high fuel loading as a result of many years of fire suppression and grazing. Livestock can and should be used as a tool to reduce fires from occurring. However, we must recognize that using livestock grazing to reduce fire frequency can have (and has had) a very detrimental effect on western ecosystems. More importantly, we must focus on the long-term challenge of how to restore naturally occurring fire regimes to landscapes in order to maintain social values. Our current prescribed burning acreages are a pittance in relation to the vast expanse of acreage that needs fire. While we extol the virtues of using livestock as a means of fire prevention, we must also carefully address the long-term consequences of doing so and concentrate our efforts on a more aggressive prescribed fire program. We need to avoid our penchant for treating symptoms while ignoring problems; such a tendency has plagued the profession of natural resource management far often in the past.