

Aspen Forage



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Quaking aspen are widely revered by range and wildlife managers alike for their diverse and nourishing array of understory plants. Young aspen sprouts are particularly favored by deer, elk, cattle, and sheep for their highly nutritious leaves and twigs. During the late summer and early autumn aspen may be the only green, nutritious, component of forests available as forage. Fortunately, aspen leaves contain defense compounds (phenolic glycosides and condensed tannins) that may deter herbivores, at least partly, from devouring young suckers. However, with high animal concentrations—often a mix of wild and domestic herbivores on the same landscape—defense mechanisms may not sufficiently deter browsing on regenerating aspen suckers. If these consumption patterns persist over many years aspen forests begin to lose their age and structural complexity. This situation seems particularly serious is stable (nearly pure) aspen forests where uncommon large disturbances offer little hope of broad forest rejuvenation.

Ongoing monitoring activities are attempting to document where livestock and wildlife browsing is threatening future aspen trees. In some cases, there is clear evidence of aspen collapse related to intensive browsing. The presence of large carnivores, such as wolves, grizzly bears, and cougars, may deter aspen browsing by keeping livestock and wildlife on the move. Domestic livestock may be more easily herded to prevent over browsing aspen. Range and wildlife managers are now working collaboratively to curtail aspen recruitment failure while continuing to sustainably utilize forage resources. Cooperative research and monitoring, as well as prudent use of fire, tree harvest, and post-treatment protection, will be required to overcome the widespread lack of aspen recruitment.

Further Reading

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