Prescribed Fire, Elk, and Aspen in Grand Teton National Park¹

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Abstract—In Grand Teton National Park, a landscape-scale assessment of regeneration in aspen has assisted park managers in identifying aspen stands that may be at risk due to a number of interrelated factors, including ungulate browsing and suppression of wildland fire. The initial aspen survey sampled an estimated 20 percent of the park's aspen stands. Assessment of these data indicate an aging stand structure plus a parkwide impact of elk and ungulate browsing on aspen regeneration less than 2 m tall. While the use of prescribed fire and wildland fire use actions may stimulate aspen regeneration, the continued impact of elk browsing may counteract the flush of postburn regeneration. To monitor this dynamic, the Grand Teton National Park has inaugurated a fire effects monitoring program. This will be used to better understand the variables (such as aspect, habitat type, timing, and size of prescribed fire application) and spatial distribution that influence browsing pressure and aspen regeneration. A review of aspen burn prescriptions, both locally and regionally, will allow managers to refine the prescriptions and enhance project success.

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