Significant Issue
Ungulate Aspen Herbivory: Without and With Fencing
Boren Mesa, Brumley Ridge Allotment, Moab-Monticello District Manti-La Sal NF
December 13, 2016

On June, 12 2014, a temporary, 8' tall polypropylene mesh fence was placed around 7 isolated, old aspen on the northern mesa edge of Boren Mesa (Figures (Figs.) 1-2). The fence is approximately 100 ft. by 350 ft. On June, 17, 2016 Dave Erley repaired a break in the fence and straightened some corner T-posts, noting browse of some leaders on aspen sprouts but an abundance reaching recruitment height (> 6 ft.; Fig. 3). On July 28, 2016, Mary O'Brien and four interns counted 180 aspen recruits (i.e., young aspen over 6' tall) within the fenced exclosure (Figs. 4-5).

Recruitment behind an all-ungulate-excluding fence cannot distinguish between protection from elk, deer, and/or cattle. However, it is clear that it is ungulate browsing alone that has prevented recruitment for decades among these six old aspen and within two years has allowed recruitment of 180 aspen sprouts. Located on an open mesa, these aspen have been particularly accessible to ungulates.

Assessment needed

Given that aspen stands are second only to riparian areas as habitats supporting biodiversity in the West, the forest plan EIS needs to assess those MLSNF areas (1) in which aspen are vulnerable to excessive ungulate browsing, e.g., on low-gradient land grazed regularly and/or cumulatively by livestock and/or large populations of elk and/or deer; and (2) those areas where old, scattered aspen are visible aerially. The Forest Service has aerial photos and persistent aspen stands (i.e., those in which conifer presence is not a significant factor) that are breaking apart due to lack of recruitment are clearly visible in such photos.

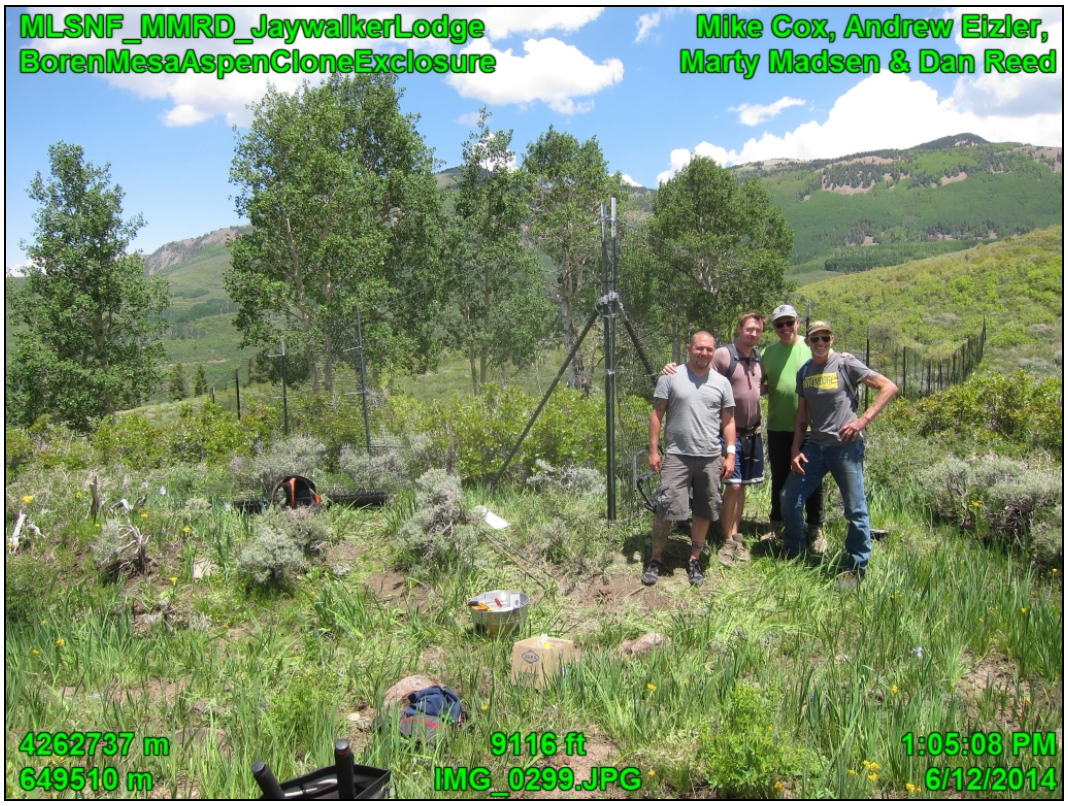

Fig. 1: Boren Mesa Aspen Exclosure on the day construction was completed June 12, 2014

Fig. 2: Aerial photo of Boren Mesa Aspen Exclosure location

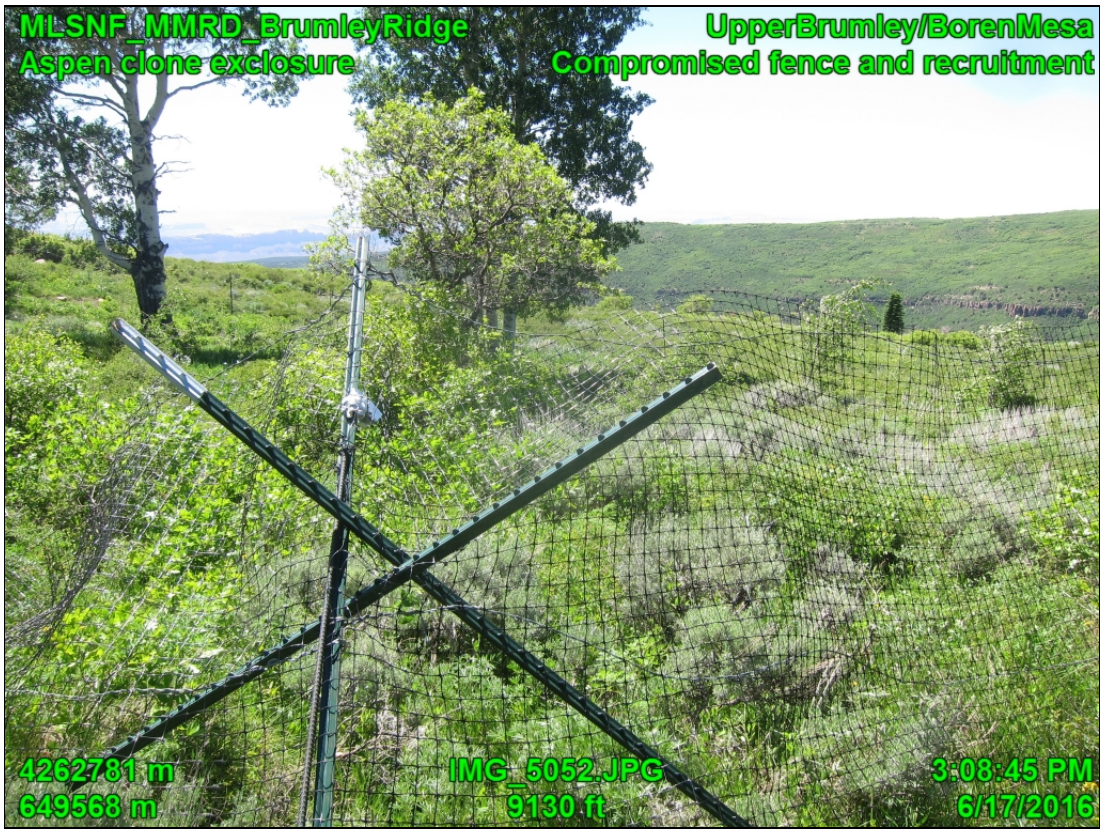

Fig. 3: Typical damage repaired on June 17, 2017

Fig. 4: View north toward exclosure and recruiting aspen among old, scattered aspen

Fig. 5: Regeneration and recruitment around an old aspen.