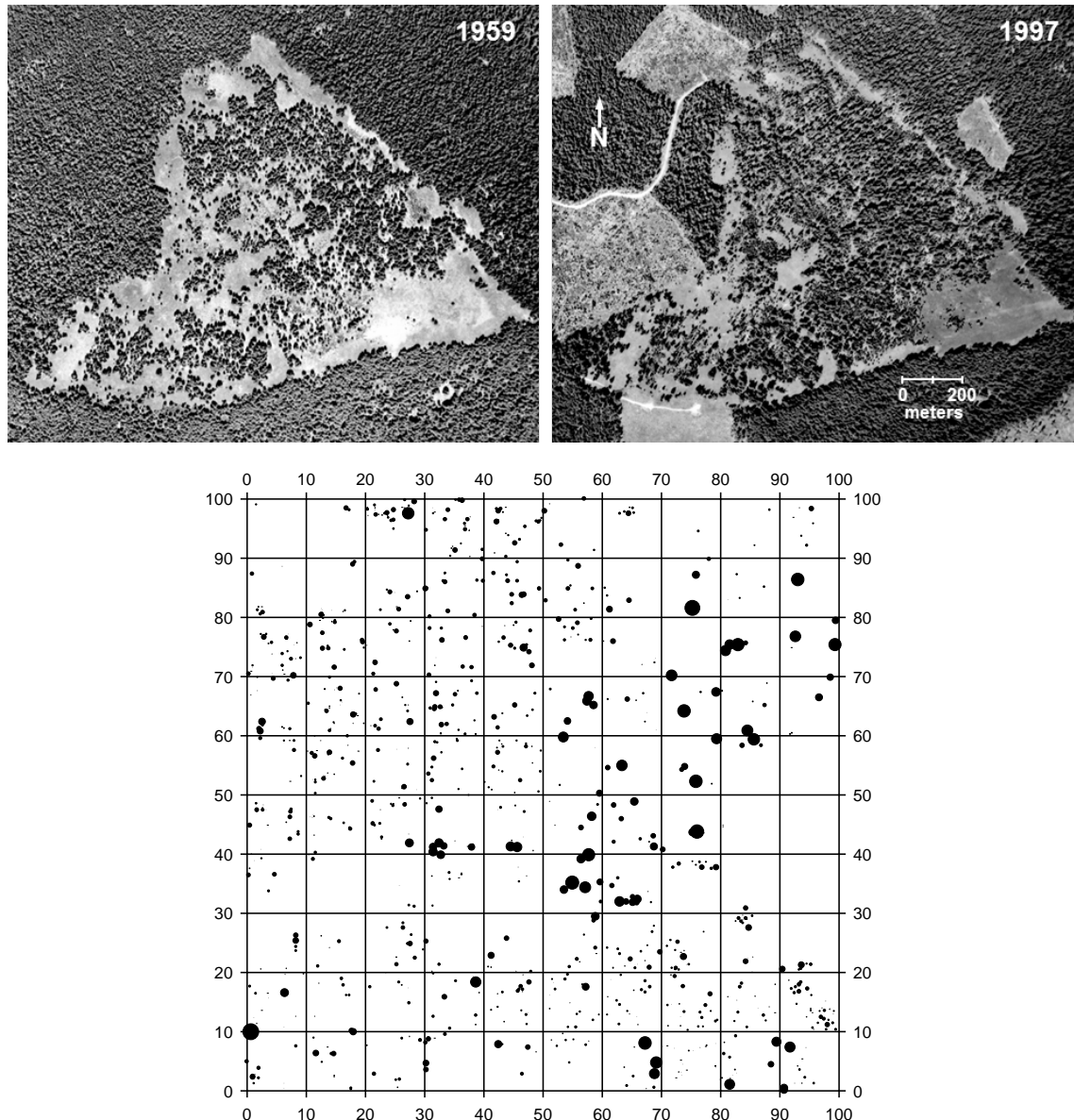


Fig. S1. Aerial photographs and a pre-treatment stem map of a 1-ha (100 × 100 m) experimental plot at Bunchgrass Ridge. Photos show evidence of 19th-century invasions (1959 photo) and 20th-century infilling of meadows (1997 photo). Clearcuts outside the study area are visible in the 1997 photo. The stem map illustrates the fine-scale mosaic of encroachment states (residual meadow openings, recent encroachment, and older forests). Subplots are 10 × 10 m. Trees are scaled by diameter; distinctly larger points are trees that established in the 19th century. All trees >1.4 m tall were mapped and aged in four of six tree-removal plots (Halpern *et al.* 2010); subplot-scale data were used to quantify relationships between pre-treatment age structure and meadow species cover (Table S1).



REFERENCES

- Halpern, C.B., Antos, J.A., Rice, J.M., Haugo, R.D. & Lang, N.L. (2010) Tree invasion of a montane meadow complex: temporal trends, spatial patterns, and biotic interactions. *Journal of Vegetation Science*, **21**, 717–732.