

Sierra Nevada Native Grass Seed Zone Study Plumas, Tahoe, Inyo, Eldorado, & Sierra National Forests

2011 Accomplishments

The Sierra Nevada Native Grass Seed Zone Study was initiated to determine the seed zone for three native grasses: blue wild rye (*Elymus glaucus*), squirreltail grass (*Elymus elymoides*) and California brome (*Bromus carinatus*) in 15 field plots on 5 National Forests in the Sierra Nevada Mountains, California. The study design will evaluate seed lot performance, across elevational, latitudinal and longitudinal gradients.

In 2003 seed was collected for the study, grown into grass plugs in 2004 and planted in the fall of 2004 and spring of 2005. Data loggers were installed in 2005 to measure air and soil temperature at all field plots. In 2005, 2006 and 2007 data were collected at all field plots including leaf length, culm height and number and damage. National Forest botany personnel collected the data.

Dr. Jay Kitzmiller, retired R5 Regional Geneticist, developed the study design. Dr. Jessica Wright, Conservation Geneticist, PSW Research Station, is assisting with further analysis and manuscript review. Jay and Jessica are developing the seed zones. Seed collection, garden and seed zone maps are being developed. The manuscript will be developed as a General Technical Report.



Figure 2. Bagley Pass field plot, Plumas National Forest



Figure 1. Mammoth field plot, Inyo National Forest.

Year Awarded: FY2011

Project completion: FY2011

Report number: 1

Expenditures (FY2011): \$20,000

Partners: Dr. Jay Kitzmiller, Consulting Geneticist & Registered Forester; Dr. Jessica Wright, PSW Research Station; Dr. Kevin Rice, University of California, Davis; BLM - California State Office; California Native Grassland Association;

