

Sierra Nevada Native Grass Seed Zone Study

Plumas, Tahoe, Inyo, Eldorado and Sierra National Forests

2005 Accomplishments

The Sierra Nevada Native Grass Seed Zone Study was initiated in 2003 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 different National Forests in the Sierra Nevada Mountains of California. Seed zones are important to the success of restoration projects that use native seeds. They identify the areas that seeds can be collected that ensure optimal growth and preserve genetic diversity. The study design will evaluate seed lot performance, across elevational, latitudinal and longitudinal gradients.

In 2003 the 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 survival data were collected at all field plots. At the west side low elevation and Inyo field plots leaf length, culm height and number and damage data were collected.

Jay Kitzmiller, retired Pacific Southwest Regional Geneticist, assisted with the study design and preliminary data analysis in 2005. Pacific Southwest Regional Genetics Program and National Forest botany personnel assisted with the planting and data collection.



Bagley Pass field plot on Plumas National Forest

Total project cost in FY05:
\$ 26,000.00

Partners:

California State Office of the
Bureau of Land Management

California Native Grassland
Association



Mammoth field plot on Inyo National Forest.



For more information about the
Sierra Nevada Native Grass Seed
Zone Study, contact:

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