Evaluation of Native Forb and Grass Seed for Rehabilitation of Post-fire Disturbed or Degraded Areas

2005 Accomplishments

Native forb and grass seed are being biologically evaluated in a 3-year project for feasibility to use in rehabilitation after fires and other disturbances. In 2004 we collected seeds of native grasses and forbs on the Deschutes National Forest in and around an area burned in 2002 by a 27,000 ac. wildfire. We evaluated seeds for damage, predation, and moisture content. Viability was tested in partnership with Oregon State University Seed Laboratory. In autumn 2004, 18 species were seeded in 20 plots within the burn for on site germination evaluation the remainder were cold stored.

In early spring 2005 we germination tested stratified seed in the lab and on site, measured seed germination, seedling predation, survival, early growth, and microsite conditions. In fall, seeds of 10 forb and 5 grass species selected for further evaluation were again collected, cleaned, tested, and sown at Lucky Peak nursery to examine effectiveness of grow-out and seed production in 2006. The project results will be presented in the form of a manual to be used as a tool by managers. It will include new and practical information on collecting strategies, techniques, and seed biology and management. Currently there is little such information available for some of these species.

The early findings on the biology and performance of these native species have already been shared with managers and practitioners at Native Plant Summit III in Boise, ID and requests for information from California, Wyoming, and Idaho, met.



Andrew Neill counting germinants of Thurber's needlegrass (*Achnatherum thurberianum*).



Zak Weinstein harvesting threadleaf fleabane (*Erigeron filifolius*) seeds (see inset) on the Deschutes National Forest.

Year Awarded: Initial award in 2004.

Projected Completion: 2006.

Report Number: 2 of 3.

Expenditures:

- FY04 funding: \$28,000, expenditures
 \$19,000; \$9,000 remaining.
- FY05 funding: \$63,000, expenditures \$64,000; \$8,000 remaining.
- Total funding \$91,000, total expenditures to date \$83,000 total remaining funds \$8,000.

Partners/Contractors/Coop: Deschutes National Forest, Oregon State University Seed Laboratory, Lucky Peak Nursery, Boise, Idaho.

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