

# Native Seed Increase and Maintenance of 2008 Seed Increase Sites on the San Bernardino National Forest

## 2009 Accomplishments

This project was initiated in 2009 with the goal of expanding efforts to develop local supplies of native plant materials for restoration of disturbed areas and continuing the maintenance and harvest of FY08 NPM seed increase projects.

### Seed Bank Development

- Rancho Santa Ana Botanic Garden continued grass and forb seed collection using protocol and to clean, test for viability and store for 5 years. 2009 collections will result in: 1.5 lb. *Bromus carinatus*, 1.3 lb. *Elymus glaucus* var. *glaucus*, 2.0 lb. *Achnatherum speciosum* and 0.5 lb. *Sphaeralcea ambigua*. *Bromus carinatus*, 1.3 *Bromus carinatus* and *Elymus glaucus* collections will be added to 2008 collections for seed increase for use in mixed conifer forest. *Achnatherum speciosum* and *Sphaeralcea ambigua* will be increased for future post-fire use in pinyon- juniper woodland.
- Developed partnership with Boy's Ranch to provide plant propagation instruction for youth and NPMs for San Jacinto District. *Nassella cernua*, *Elymus elymoides*, and *Achnatherum coronatum* seed was collected and is being grown to outplant 20,000 plugs for seed increase plots. Fencing, irrigation and outplanting of plugs to be completed in December of 2009.
- Weeded and maintained *Bromus carinatus* and *Elymus elymoides* seed increase plots developed in 2008 at Big Bear Mt. Ski Resort.
- Restoration staff, Cal State San Bernardino and Victor Valley College interns and monthly Green Thumb Volunteers collected, cleaned and stored 17 species of seed for ongoing and future restoration projects.
- Reviewed Draft Plant Profile Tables created by Montalvo and Beyers for "Seed Recommendations for So CA Ecoregions," a 2008-09 NPM PSW project.
- Partnered with RSABG, UCR, and UCSB student to create and display poster titled "Development of Seed Increase Program on the SBNF" at the 2009 CNPS meeting.

### Leverage with other funding allowed us to accomplish additional activities/purchases to enhance our existing NPM Program

- Participated with Regional "Ski Slope Plant Revegetation NPM Study." Collected seed for outplanting in 2010 and completed data collection in 9 plots.
- Participated in the USDA Hispanic-serving Institutions Education Grant Program through Cal State University, San Bernardino resulting in completion of 800 hours of internship work in support of our restoration projects.
- Continued operations of SBNF NPM facilities, monthly volunteer days, Children's Forest partnership and 8 ongoing restoration projects.
- Acquired 16 x 8 ft. outdoor walk-in Polar King cooler for long term seed storage.
- Propagated 347 pots of 10 species for bridge restoration.



Figure 1. Seed drying at Big Bear Native Plant Materials Facility

Year Awarded: Initial award in 2009

Project completion: 2009

Report number: 1

2009 Expenditures: \$14,000

Partners/Contractors/Cooperators: Rancho Santa Ana Botanic Garden, Big Bear Mt Ski Resort, Twin Pine's Boys Ranch, Cal State University San Bernardino and Victor Valley College.



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