

# Black Hills National Forest Native Plant Materials Program

## FY 2007 Accomplishments

The overall goal of the Black Hills Native Plant Program is to develop a concentrated source of native plant materials that can be used for restoration and rehabilitation efforts. Because the Black Hills is a forested island in a sea of native, northern mixed grass prairie, plant communities of the Black Hills usually contain elements common to both northern prairie and ponderosa pine ecosystems.

The specific objective of the program for 2007 was to collect seeds from forest and grassland plant communities, and then evaluate seed viability, germinability, and plant establishment under laboratory and field conditions. Significant progress was made toward achieving that objective. Training was provided for all project partners in proper seed collecting and processing. A preliminary list of 45 species was developed from a variety of previous research projects conducted on disturbed (fire and logging) and undisturbed areas in the Black Hills. Seeds of selected species were harvested from diverse sites and transported to the Forest and Grassland Research Laboratory where they were dried and cleaned. In addition, whole plant material (roots and crown) of 4 grass species was collected and transplanted within a portion of a 2-acre research, demonstration, and seed production site that was established at the Rapid City Forest Service Center. The site was previously treated with a broad spectrum herbicide. A water line to the site was also constructed.

A research joint venture agreement was established with South Dakota State University using FS Research & Development funds that will be used to support a graduate student to test for seed viability during early 2008, and conduct germination and seeding trials during the 2008 and 2009 field seasons. The ultimate goal of the research is to identify individual species and combinations of species that are relatively easy to collect and have high germinability and establishment. The identified species will then be concentrated at the Rapid City FS Service Center site and promoted for commercial production.

The RMRS Black Hills Native Plant Materials Program benefited greatly from partnering with the BBNF Restoration of Black Hills Montane Grassland Sites program. Both programs have very similar goals and we were able to combine resources and expertise for a more productive and efficient effort.



Crew transplanting selected native species into plant materials site at the Rapid City Forest Service Center.

**Year Awarded:** 2007

**Project completion:** 2010

**Report number:** 1

**Expenditures:**

- FY07 funding: \$37,864
- Expended: all FY07 funds obligated or spent (salaries for site preparation, seed collecting/processing, including training and travel; purchased seed blower, seeding flats/pots).

**Partners:** Black Hills National Forest, USGS Northern Prairie Wildlife Research Unit, Rapid City.

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