

# Development of Seed Transfer Zones for Two Native Shrubs through Common Garden Studies in Region One

## 2011 Accomplishments

In 2008 Region One initiated its Seed Transfer Zone Study to determine seed transfer guidelines for core revegetation species. 2011 represents its fourth year of this effort.

Each year, two species are selected for common garden study. Red osier dogwood (*Cornus sericea* ssp. *sericea*) and shinyleaf spirea (*Spiraea betulifolia* var. *lucida*) were selected for study in 2009. R1 forests and grasslands collected wildland seed for the two species and the common garden study was initiated in 2010 at the USFS Coeur d'Alene Nursery under the guidance of the Region 1 Geneticist and the Region 1 Native Plant Program.

**2011 Accomplishments:** Phenology and morphology data was collected for red osier dogwood and shinyleaf spirea during the 2011 growing season. Crews from the Coeur d'Alene Nursery and various forests conducted intensive data collection to acquire information on eight species variables. This is the first year of data collection for these two species.

This initiative will contribute to our understanding of genetic variation in native species within their range in the northern Rocky Mountain Ecosystem and northern Great Plains. The results of the study will be used to develop seed transfer guidelines for Forest Service System lands in Region One as well as adjacent areas. Results will also be used to compare native genotypes to "restoration cultivars".

**Year awarded:** Initial award in 2009

**Project completion:** 2013

**Report number:** 2 of 4

**Expenditures** (through 10/2011):

- FY09 funding \$91,600 (NFN3).
- Expended approximately \$75,000 from FY09 to FY11.
- **\$16,600 remaining for FY12 to FY13.**

Partners/contractors/cooperators: R1 Geneticist, R1 Native Plant Program, Coeur d'Alene Nursery, R1 Forests and Grasslands.

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**Upper figure:** Red osier dogwood, a shrub commonly used for riparian revegetation.

**Lower figure:** Shinyleaf spirea, another favorite revegetation shrub found in forested habitats throughout the northern Rocky Mountains.



Leavenworth Ski Hill ~ Photo by Thayne Tuason

The study is a cooperative venture between the USFS Coeur d'Alene Nursery, the R1 Regional Geneticist, the R1 Native Plant Program, and R1 forests and grasslands.



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