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

2009 Accomplishments

The Five-Year Action Plan for the R1 Native Plant Program identified the need to develop seed transfer zones for core native revegetation species. In 2008 a multi-year project was initiated to utilize common garden study methodology in collecting data on select native plant species commonly used for revegetation. This project 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".

2009 Accomplishments: During the 2009 field season, Region One forests and grasslands conducted wildland seed collection for two shrub species: red osier dogwood (*Cornus sericea ssp. sericea*) and shinyleaf spirea (*Spiraea betulifolia var. lucida*).

Common garden studies for these two species will be conducted by the Coeur d'Alene Nursery from 2010 through 2012. Seedlings will be grown out in the greenhouse in early spring, 2010, before being transferred to common garden study field plots. Data collection will involve plant morphology and phenology assessments at various plant growth stages.

Year awarded: Initial award in 2009

Project completion: 2012

Report number: 1 of 4

Expenditures (through 10/2009):

- ■FY09 funding \$91,600.
- Expended approximately \$63,600 in FY09.
- **\$28,000** remaining for FY10-FY12

Partners/Contractors/Coop: Coeur d'Alene Nursery and all the Forests and Grasslands in Region One.

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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.



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



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