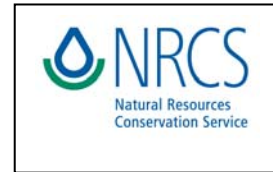




GLACIER NATIONAL PARK
FY 2005 SUMMARY REPORT
prepared by

NATURAL RESOURCES CONSERVATION SERVICE
BRIDGER PLANT MATERIALS CENTER



INTRODUCTION: The Bridger Plant Materials Center (BPMC) has maintained a cooperative agreement with Glacier National Park (GNP) since FY 1986. This agreement facilitates the collection, increase, and re-establishment of indigenous plant materials, and the development of technologies for the restoration of disturbances resulting from road construction and other projects within Park boundaries. Wildland seeds are collected by GNP staff, dried, and then mailed to the BPMC where they are cleaned, weighed, accessioned, inventoried, and stored until needed. Wildland and cultivated seed may be used by the BPMC or commercial growers for seed increase or plant production, or sent back to GNP for direct field seeding or plant production.

ACCOMPLISHMENTS: In 2005, 60 seed lots representing 31 individual species and totaling 8.46 pounds (3.84 kg) were delivered to GNP or used for BPMC production. The 2005 seed distribution included 12 grass lots (8 species), 41 forb lots (20 species), and 7 shrub lots (3 species). In addition, a total of 4,700 container plants representing 5 collections (4 species) were either planted at the BPMC for seed increase or delivered to GNP for restoration activities. No old seed lots were shipped to GNP in 2005 since nearly all GNP seed lots in storage are now 10 years or less in age.

In 2005, 91 wildland collections were sent to the BPMC and cleaned: 36 collections of grasses, sedges, and rushes (15 species); 44 forb collections (34 species); and 11 shrub and tree collections (8 species). A total of 48.11 lbs. (21.822 kg) of clean seed were processed; 32.38 lbs. (14.686 kg) of grass and grass-like, 15.25 lbs. (6.916 kg) of forbs, and 0.48 lbs. (0.220 kg) of trees and shrubs. A total of 35 new species:collection sites were identified and accessioned representing 13 grass or grass-like (8 species), 19 forb (18 species), and 3 woody plant (3 species) lots.

Five established seed production fields remained active in 2005, including *Carex athrostachya* (9078591-Camas); *Carex athrostachya* (9081443-Avalanche); *Carex pachystachya* (9078645-Avalanche); a combined field of two lots of *Symphotrichum laeve* (*Aster laevis*) (9081447-Avalanche) and *Phleum alpinum* (9054559-Logan Pass). These fields produced a total of 9.08 lbs. (4.119 kg) of seed. No seed was harvested from *Carex athrostachya* (9078591-Camas) because of poor fill. In addition, a total of six new seed production fields were installed in 2005, two fields were direct seeded and four were established from 1-0 plugs. Fields of *Festuca idahoensis* (9075848-Saint Mary) and *Achnatherum nelsonii* (9081995-Two Dog Flats) were field sown on April 15, 2005 in Field 6. A total of 4,250 plugs were grown in the greenhouse and then field planted at the BPMC in 2005 for seed increase including 1,650 *Achillea millefolium* (9063640-Cut Bank), 1,750 *Pseudoroegneria spicata* (9076127-Two Medicine), 250 *Pseudoroegneria spicata* (9081993-Two Dog), and 600 *Eurybia conspicua* (9087433-Lake McDonald).

Seed germination tests are currently being conducted on four accessions (four species) grown at the BPMC in 2005 including *Carex athrostachya* (9081443-Avalanche), *Carex pachystachya* (9078645-Avalanche), *Symphotrichum laeve* (*Aster laevis*) (9081447-Avalanche), and *Phleum alpinum* (9054559-Logan Pass). Results will be presented in the Glacier National Park 2005 Annual Technical Report.

A total of 450 *Mahonia repens* (9054489-Apgar) plants were delivered to GNP on August 9, 2005. A total of 2,346 container plants remained in cold storage at the BPMC at the end of 2005 including 1,646 *Achnatherum nelsonii* (9081995-Two Dog Flats), 467 *Pseudoroegneria spicata* (9081993-Two Dog Flats), 132 *Pseudoroegneria spicata* (9076127-Two Medicine), 80 *Eurybia conspicua* (9087433-Lake McDonald), and 21 *Mahonia repens* (9054489-Apgar). Seeds of *Geum macrophyllum* (9076144-Lake McDonald) are currently being stratified for 2006 production.

TECHNOLOGY DEVELOPMENT: Replicated seed germination tests were conducted for GNP in late summer on 12 lots of grass (12 species) stored at the Park and needed for upcoming restoration projects. Seeds per pound data collected at the BPMC on various wildland and cultivated lots were sent to GNP in support of a report summarizing seeds per pound of numerous species indigenous to the Park. An abstract titled, "Effects of Erosion Control Blanket on the Germination of Six Native Species" was submitted to the 2006 Billings Land Reclamation Symposium for presentation in Billings, Montana in July 2006. A coordination and project inspection visit was conducted at GNP from August 10-11, 2005.