

ACADIA NATIONAL PARK 2006

ANNUAL REPORT

Prepared by USDA, Natural Resources Conservation Service, Big Flats Plant Materials Center

I. INTRODUCTION:

The USDA, Natural Resources Conservation Service, Big Flats Plant Materials Center, entered into an interagency agreement with the USDI, National Park Service, Acadia National Park: IA Project No. 4500-06-001 (Cadillac Mountain Summit Trail). The Natural Resources Conservation Service agreed to:

- (1) Collect seed and plant materials of selected species within Acadia National Park boundaries.
- (2) Use these seeds and plant materials to establish isolated seed increase fields of grasses and forbs, to produce plugs and transplants of grasses, forbs, trees and shrubs.
- (3) Make available seed, plugs and transplants to Acadia National Park for re-vegetation of the Cadillac Mountain Summit Trail in 2006.

The park will use the plant materials for trail re-vegetation after completion of the summit trail on Cadillac Mountain, and seeding/planting areas disturbed during the reconstruction project in the park. The PMC activities have focused on seed and plant collections in the Acadia National Park, seed production, processing and conditioning, seed/plant propagation of plugs and transplants at the plant materials center, maintaining seed increase fields, propagating materials vegetatively and delivering the plant materials back to the Park.

II. ACCOMPLISHMENTS:

One delivery of plant materials were made on June 21, 2006. This included 3,055 plugs of grasses (red fescue, hairgrass, poverty oatgrass); 2,825 plugs of forbs (large leaf aster, white flattop aster, New York Aster, rough stemmed goldenrod, Canada goldenrod); one gallon potted plants of balsam fir (54), white spruce (39), fly honeysuckle (4), and arrowwood viburnum (6); and 104.7 lbs. of red fescue seed.

Seed increase fields of red fescue grew fairly well this year, with wetter than normal weather conditions. For forb production, in 2001 we established the new seed production blocks, using weed fabric that has worked well in controlling weeds. Seed of goldenrods (Canada and rough stemmed) and asters (large leaf and white flat-topped) were harvested in 2006, using both combine and hand harvest methods. The desired weed control from the weed fabric is still being attained. The weed fabric is still structurally strong after six years of use. The small, light seed is still challenging to harvest and clean. A brush seed cleaning machine has assisted us in seed cleaning by being able to remove the awns from the fluffy seeds. All seed in 2006 is being tested at the Kansas Seed Improvement Cooperative Lab in Manhattan, KS. We found that deer like NY Aster, eating the entire production area down again this year, to a one foot height.

At Acadia, plant material was planted in September on Cadillac Mountain along the summit trail after the construction work was completed. Areas were covered first with topsoil and wood chips in late summer with the park staff and summer crew, followed by planting/seeding of grasses, forbs and shrubs. Also this summer, plant materials were utilized to revegetate disturbed areas in the park. Roped off areas, three-legged wooden fence barriers and the posting of re-vegetation signs has helped keep visitors out of the plantings, giving the plants a chance to grow. All plantings were mulched and watered with excellent survival of the plantings. The plantings done in the past 2 to 3 years at the Carriage Road Bridges and the Seawall Campground are growing well and revegetating the disturbed areas. The extra attention given to these plantings by the dedicated park staff has definitely affected the success of these plantings.

III. TECHNOLOGY DEVELOPMENT/TRANSFER

The poster “Native Plants for National Parks” was presented at the Society of American Foresters Annual Conference in Pittsburgh, PA on October 26-28, 2006 that had 1430 participants and at the 5th Eastern Native Grass Symposium in Harrisburg, PA on October 11-13, 2006 that had 266 participants. After using weed fabric for our seed production blocks of forbs for several years it was still working very well for weed control, and allows for easier seed harvesting, either by hand or combine. Many of the plantings in the park area are growing well, especially where wood mulch was applied to assist in retaining moisture in the soil. With so many park visitors, revegetation signs have minimized the trampling of plants as well as educate the public on how the park service is restoring disturbed areas with native plants. This was the final year of the agreement.



Signs to educate the public and protect plantings



Trail construction on Cadillac Mountain



Educational sign by the trail on Cadillac Mountain



Plantings after campsite reconstruction



Planting utilizing wood chips in campground area



Protecting the fragile environment on Cadillac Mountain



Stabilizing a steep trail path



Stabilizing a steep slope along Carriage Road Bridge



Seeding along the park road after road repaving



Mt. Ash in bloom on Cadillac Mountain



Plantings at entrance to Carriage Roads



Plantings along spillway by Jordan Pond