## ACADIA NATIONAL PARK 2005 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:

(A) Collect seed and plant materials of selected species within Acadia National Park boundaries.(B) 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.

(C) 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:**

Seed was collected on September 21-24, 2005 (arrowwood viburnum, white birch, wild raisin, mountain holly, mapleleaf viburnum, bayberry, Red Oak, dogwood, huckleberry, highbush cranberry, and Sambucus). The seed was shared with Cape May Plant Materials Center to assist them with the Blackwoods Campground revegetation project.

One delivery of plant materials were made in September 2005. This included 602 plants in one gallon pots (17 species) and 2290 plugs (4 species).

Seed increase fields of red fescue grew fairly well this year, with drier and hotter than normal weather conditions. For forb production, in 2001 we established new seed production blocks, using weed fabric that has worked well in controlling weeds. Seed of goldenrods (Canada and rough stemmed) and asters (New York, large leaf and white flat-topped) were harvested in 2005, 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 five years of use. The small, light seed is still challenging to harvest and clean. A new brush seed cleaning machine has assisted us in seed cleaning by being able to remove the awns from the fluffy seeds. All seed in 2005 is being tested at the New York State Agricultural Experiment Station's Seed Lab in Geneva, New York. We found that deer like NY Aster, eating the entire production area down to a one foot height, but the plants still produced a good seed crop.

At Acadia, plant materials were utilized to revegetate disturbed areas with the summer crew. Roped off areas and the posting of re-vegetation signs has helped keep visitors out of the plantings, giving the plants a chance to grow. At the Seawall Campground, three-legged wooden fence barriers were added to protect the plantings. All the plantings were mulched and watered with excellent survival of the plantings. The campers have been staying in the designated campsite areas allowing the plants to grow relatively undisturbed. A great idea of the re-veg crew was the mounting of informational posters on the mirrors in the campground restrooms...so as campers brush their teeth they learn about the reveg work in their campsite. The plantings done in the past two years at the carriage road bridges are growing well and stabilizing/revegetating the steep slopes. Placement of rock steps/trail along the bridge abutments have kept hikers from trampling the plants.

## III. TECHNOLOGY DEVELOPMENT/TRANSFER

Forb seed production using the weed fabric has worked well in controlling weeds. In September, collections of seed for the Cape May Plant Materials Center were made for their Blackwood Campground Rehab Project. The re-vegetation signs have minimized the trampling of plants as well as educated the public on how the park service is utilizing native plants. Many of the plantings in the park are growing well where wood mulch was applied to assist in retaining moisture in the soil. Two posters were presented in 2005. 'Native Plants for Acadia National Park' authored by NRCS and the Park was presented in March at the George Wright Society's Biennial Conference in Philadelphia, PA. 'Native Plants for National Parks' was presented in July at the Soil and Water Conservation Society's Annual Meeting in Rochester, NY attended by 800 participants.



Planting at Carriage Road Bridge entrance







**Revegetation Sign** 



Carriage Road Bridge seeding



Roped area

Three legged wooden fence barriers



Revegetating sites in campgrounds

Seeding of shoulder after repavement of road



Trailhead planting with signage



Planting with rock steps along abutment