



Exotic Plant Management Program

Acadia National Park

Background Information

Acadia National Park's flora was first systematically studied by two Harvard scholars, who published *Flora of Mount Desert Island* in 1894. Additional publications followed, and voucher specimens exist in both National Park Service and university herbariums around the country (e.g., University of Maine at Orono, University of Minnesota, and Harvard University). Over 1200 vascular species are known from the park.

Nearly a quarter of all vascular plant species in the park are non-native. A list of 22 priority invasive plant species at the park has been developed using a quantitative ranking process based on empirical data and information from the literature. Data have been collected on the abundance and distribution of many of these species. Management plans for all these priority species have recently been completed.

Purple loosestrife has been the principal species of concern at the park; we've been monitoring and managing it through an integrated management approach, including herbicide application, since 1988. A peer review of the Park's purple loosestrife management program was completed in 1997. Management of other priority species has begun in the last couple of years.



Garlic mustard flowers and foliage (© D. Cappaert).

Program Components

- Manage priority species using proven techniques based on sound science
- Monitor trends of invasives and other native plants, including efficacy of treatments
- Prevent and detect new infestations
- Coordinate management with adjacent landowners and agencies
- Educate employees, visitors, and park neighbors
- Manage information related to invasive exotic plant management

Non-native species detections in Northeast Temperate Network forest monitoring plots located in Acadia NP (total plots = 126).

Scientific Name	Common Name	# of Plots
<i>Berberis thunbergii</i>	Japanese barberry	1
<i>Festuca filiformis</i>	fineleaf sheep fescue	10
<i>Frangula alnus</i>	alder buckthorn	1
<i>Lonicera spp. (Exotic)</i>	honeysuckle	1
<i>Phleum pratense</i>	timothy grass	1
<i>Poa nemoralis</i>	wood bluegrass	1
<i>Ranunculus acris</i>	meadow buttercup	2
<i>Rosa multiflora</i>	multiflora rose	1
<i>Stellaria graminea</i>	grassy starwort	1

Number of exotic plants treated at Acadia National Park between 2004 and 2008.

Scientific Name	Common Name	2008	2007	2006	2005	2004
<i>Lythrum salicaria</i>	purple loosestrife	2,000	-	1,000	1,757	1,442
<i>Alliaria petiolata</i>	garlic mustard	11,000	-	31,590	8,900	19,563
<i>Tussilago farfara</i>	coltsfoot	-	-	98	293	901
<i>Digitalis purpurea</i>	foxglove	1,100	-	5,440	865	3,249
<i>Frangula alnus</i>	alder buckthorn	1,100	-	-	-	-