



Temperate Times

Acadia National Park: Listening to the Park's Forest

The forests of the Northeast have been admired for their beauty as well as utility; and they have inspired American icons such as Ralph Waldo Emerson, Henry David Thoreau, J. Alden Weir, Childe Hassam, and Franklin D. Roosevelt, to mention just a few names with ties to the Northeast. Their voices put forth the first ideas to protect this valuable resource, a resource that is integral to the landscape that makes up this part of America.

“Forests are the ‘lungs’ of our land, purifying the air and giving fresh strength to our people.”

*Franklin D. Roosevelt, speech,
29 January 1935*

The Northeast Temperate Network (NETN) has completed two years of Forest Condition Monitoring in Acadia NP. In 2006 38 plots were established. In 2007 42 plots, out of a targeted 44, were installed. This pattern will continue in 2008 and 2009 with an ideal of 44 plots installed each year, for a total of 176 total plots in the park. Furthermore, a pilot program to monitor rare community plots (pitch pine/broom

crowberry woodlands) was started in 2007, testing procedures at several plots. Additional permanent rare community plots will be installed in 2009. The information gathered through the monitoring program will be used to determine the long-term health of the park's forest.

As scientists learn more about the effects of climate change on forests, the information gathered from the forest condition plots will aid managers in better determining what management decisions need to be made to protect this resource. The forests of Acadia are but one part of an intricately

linked environment, and each component affects the other. In addition to forest monitoring, the NETN has annual monitoring programs for Water Quality in the lakes, ponds, and streams of the park, wetland conditions in the park, and Forest Breeding Birds. Future monitoring programs include coastal breeding birds and rocky intertidal habitats.

Information about the monitoring that is occurring in the park can be found on the NETN website: <http://science.nature.nps.gov/im/units/netn/index.cfm>.



Breeding Landbird Monitoring at Acadia

In 2006, 5 pilot study sites were established to monitor breeding landbirds. These sites consisted of a total of 50 point count stations, and at least one station was located near a forest condition monitoring site. After this pilot program's field test, adjustments were made to the study and in 2007 4 (out of a possible 10) new study sites were randomly chosen to better represent the overall diversity and environment that comprises Acadia NP. Within these study sites a total of 29 point count stations were established; stations are near forest monitoring sites and in the same habitat type. Sampling occurs each year during the breeding season of migratory landbirds (mid-May through June, depending on latitude), and will include those species that may potentially breed in the park. Listed below are the results for both 2006 and 2007. The marked differences in species counts is attributed to the change in sampling design. The protocol used in 2007 will continue to be used in 2008 with 2 additional study sites being added to the existing 4 established in 2007.

	2006	2007		2006	2007
Black-throated Green Warbler	50	49	Eastern Bluebird	1	
Golden-crowned Kinglet	30	10	Eastern Towhee **		1
Hermit Thrush	28	10	Gray Catbird	1	
Pine Siskin	24	8	Great Crested Flycatcher		1
Ovenbird	21	19	Herring Gull	1	1
Blue-headed Vireo ***	18	10	Least Flycatcher	1	4
Purple Finch **	13	5	Red Corssbill	1	
Blackburnian Warbler ***	12	8	Red-winged Blackbird	1	1
Brown Creeper	12		Scarlet Tanager **		1
Mourning Dove	12	18	Yellow-bellied Sapsucker ***	1	
Red-breasted Nuthatch	11	14	Wood Thrush **	1	1
American Crow	10	12	Unidentified Woodpecker		1
Yellow-rumped Warbler	10	3	Species Richness	44	40
Dark-eyed Junco	9				
Red-eyed Vireo	8		Partners in Flight Action Priority Rankings:		
Swainson's Thrush	8	4	** Management or other on-the-ground conservation actions are needed		
American Robin	7	13			
Ruby-crowned Kinglet	7	2			
Slate-colored Junco		7	*** Long-term planning actions are needed to ensure that sustainable populations are maintained		
Winter Wren	7	7			
American Goldfinch	6				
Boreal Chickadee ***		6	Partners in Flight		
Black-throated Blue Warbler ***	5	2	(PIF) is a co-		
Common Raven	5	9	operative effort		
Pileated Woodpecker		5	involving part-		
Black-capped Chickadee	4	4	nerships among		
Northern Parula ***	4	1	federal, state,		
Blue Jay	3	5	and local gov-		
Hairy Woodpecker	3	6	ernment agen-		
Brown Creeper		2	cies, in addition		
Canada Warbler **	2		to private and		
Chestnut-sided Warbler		2	academic groups.		
Eastern Wood-Pewee **	2		PIF provides an		
Magnolia Warbler **	2	4	objective process		
White-throated Sparrow ***	2		for ranking spe-		
Alder Flycatcher		1	cies conservation		
Baltimore Oriole **	1		needs within		
Black-and-White Warbler	1	4	physiographic		
Broad-winged Hawk	1		regions to better		
Brown Thrasher **	1	1	focus and coord-		
Cedar Waxwing	1	3	inate manage-		
Common Grackle		1	ment efforts.		
Common Loon	1				



Magnolia Warbler ©Charley Eiseman



Northern Parula ©Charley Eiseman



National Park Service
U.S. Department of the Interior

Northeast Temperate Network

54 Elm Street
Woodstock, Vermont 05091
802-457-3368
<http://www1.nature.nps.gov/im/units/netn/index.cfm>

Coordinator

Brian R. Mitchell ext. 37
Brian_R_Mitchell@nps.gov

Appalachian Trail Coordinator

Fred Dieffenbach ext. 36
Fred_Dieffenbach@nps.gov

Data Manager

Adam Kozlowski ext. 40
Adam_Kozlowski@nps.gov

Natural Resources Specialist

Kate Miller
Kathryn_Miller@nps.gov
207-288-8736

Science Communication

Theresa T. Moore ext. 23
Theresa_Moore@nps.gov

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.