



Project Impacts

NSRC-FUNDED RESEARCH FINAL REPORT

Citizen Scientists Enlisted to Help Track Changes in Forests and Climate

PROJECT AWARD YEAR AND TITLE:

2007

A New NERC Phenology Working Group

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Scientists have documented that climate change is affecting the timing of spring warm-up and fall cool down. These changes alter the timing of plant life stages (such as bud break, flowering and leaf fall) or what is called “phenology.” At the national level, many scientists tracking phenological changes have begun to collaborate as part of the USA National Phenology Network (USA-NPN). In support of this national effort, NSRC researchers initiated a more focused regional network in the northeastern United States and eastern Canada called the Northeast Regional Phenology Network (NE-RPN) at a November 2007 workshop that included northeastern researchers in forest ecology and remote sensing, leaders of “citizen science” groups, and members of the USA-NPN.

At the workshop, researchers initiated conversation about what type of observational data was necessary for their research and how best to motivate citizen scientists to help collect it. Follow-up discussions helped inform development of national standardized phenology monitoring protocols used in the USA-NPN’s *Nature’s Notebook*, a national plant and animal phenology observation program for professional and citizen scientists.

Citizens can join thousands of others providing valuable observations that scientists, educators, policy makers, and resource managers use to understand how plants and animals are responding to climate change and other environmental changes. Observations by Northeast participants are now helping researchers detect early leaf-out in forests from St. Louis to Maine in response to unusually warm winters and springs and are being used in a number of publications.