

LONG-TERM FOREST GENETICS RESEARCH IN NORTHEASTERN NORTH AMERICA: A SAMPLER

Katherine K. Carter

Department of Forest Management, 5755 Nutting Hall, University of Maine, Orono, ME 04469
carter@umenfa.maine.edu

Tree breeding research began in the Northeast as early as the 1920s, when the Oxford Paper Company of Rumford, ME sponsored hybrid poplar breeding work by Dr. Ernest Schreiner. This research was transferred to the USDA Forest Service Northeastern Research Station in Durham, NH in 1937. For the rest of the 20th century, the Station remained active in long-term forest genetics research on a variety of species, including many research plantations on the Massabesic Experimental Forest near Alfred, ME. Some recent applications from research originated by the USDA Forest Service on white pine and sugar maple illustrate the continuing utility of this work. Various universities in New England also maintain long-term forest genetics research projects.

At about the same time that hybrid poplar research was beginning in the Northeastern U.S., forest genetics research was also underway in Canada. Much early work was based at Petawawa, Ontario. Over 300 genetic test plantings still exist there and are available for ongoing research activities. Applied tree improvement programs began in eastern Canada in 1976 with the cooperative New Brunswick Tree Improvement program that originated as a joint effort by forest industry, provincial and federal governments, and universities. The NBTIC seed orchards are now producing adequate supplies of black spruce, jack pine, and white spruce seed to meet all planting needs in the province. The provinces of Quebec, Ontario, and Nova Scotia maintain similar long-term applied tree improvement programs.