

## Contents

*Map plotting each study site location* vi

Editors' Notes vii

Foreword

*David M. Smith* 8

Northeastern United States 10

Listening to Old Beech and Young Cherry Trees—Long-term Research in the Alleghenies

*Susan Stout, Coeli Hoover, and Todd Ristau* 10

Turning Data into Knowledge for Over 50 Years: USDA Forest Service Research on the Penobscot Experimental Forest

*Laura Kenefic, Paul Sendak, and John Brissette* 26

Wildlife Assessments at the Bartlett Experimental Forest

*Mariko Yamasaki* 34

Long-term Forest Genetics Research in Northeastern North America

*Katherine Carter* 37

Sustaining Long-term Research Through Changing Times at the Harvard Forest

*Audrey B. Plotkin and David Foster* 41

Long-term Monitoring of Stand Development after Selection System Silviculture in Uneven-aged Northern Hardwoods of New York State

*Kimberly K. Bohn and Ralph D. Nyland* 53

Long-term Studies: The Roots of Silviculture in the Lake States

*Christel Kern* 63

Seventy Years of Stand Dynamics in Connecticut Hardwood Forests—The Old-Series Plots

*Jeffery Ward* 68

The Great Northern Paper Company P.O. Series—Stand Dynamics in Northern Maine, 1924-1994

*Kenneth M. Laustsen* 71

Quabbin Reservoir, MA: Monitoring Watershed Forests Using CFI—1960-2000

*Thom Kyker-Snowman* 74

Maple Research at the University of Vermont

*Timothy Perkins* 80

Long-term Forest Ecosystem Studies of the Cooperative Forestry Research Unit and the University of Maine

*Spencer R. Meyer, Robert G. Wagners, Jack Witham, Steve Norton, Ivan Fernandez, Bruce Wiersma, Erin Small, Jeremy Wilson, and Al Kimball* 83

Large Area Comparisons of Forest Management Practices in West Virginia (1951—Present)

*Thomas M. Schuler, W. Mark Ford, Mary Beth Adams, James N. Kochenderfer, and Pamela J. Edwards* 94

Eastern Canada 104

Acadia Research Forest: A Brief Introduction to a Living Laboratory

*Ed Swift, Brian Kilpatrick, Tom Murray, Dean Toole, John Henderson, and Chris Pitt* 104

Long-term Silviculture Research on Northern Hardwoods in Québec (Canada)

*Steve Bedard and Michel Huot* 119

“Twenty Year Results, You’re Just Getting Started”: Long-term Experimentation at the Petawawa Research Forest

*Steve D'Eon* 128

The Need for Long-term Research Installations and Datasets

*Philip Burton* 136

Southern United States 139

Long-term Timber Productivity Research on Intensively Managed Pine Forests of the South

*Mark Eisenbies* 139

Long-term Site Productivity Studies in Loblolly Pine Plantations of the Southern U.S. (Abstract)

*Eric Vance and James Barnett* 154

Long-term Longleaf Pine (*Pinus Palustris* Mill.) Plantation Studies on the Palustris Experimental Forest: Growing Timber to Provide Habitat

*J.C. Goelz and J.C. Barnett* 163

Understanding Soil Change at the Calhoun Experimental Forest’s Long-term Soil Experiment

*Daniel deB. Richter, Mac A. Callahan, D. Markewitz, and R. Vilgalys* 169

Western United States	176
Permanent Plots in Natural Stands in the Pacific Northwest <i>Sarah Greene, Howard Bruner, and Kari O'Connell</i>	176
Silvicultural and Other Long-term Research at the Pringle Falls Experimental Forest <i>Ann Camp and Andrew Youngblood</i>	182
Long-term Vegetation Studies in the Southwest <i>Jonathan D. Bakker, Margaret M. Moore, and W. Wallace Covington</i>	187
Methods and Outreach	197
What are Land Managers Looking For?—Outside the Wildlands <i>Si Balch</i>	197
Long-term Data from Silvicultural Studies: Interpreting and Assessing Old Records for Economic Insights <i>Paul Sendak, Robert Frank, and William Leak</i>	203
Outreach to Other Researchers and Managers <i>Karen Bennett</i>	208
Managing the System	211
Why Long-term Research Matters <i>Alec Giffen</i>	211
FERNS: The Forest Ecosystem Research Network of Sites <i>J.D. Mills</i>	215
USDA Forest Service Experimental Forests and Ranges <i>Ralph H. Crawford</i>	222
The Future of Long-term Silvicultural and Ecological Research Sites <i>Michael Rains</i>	226
Appendix A	
<i>Selective Reference List on Long-term Silvicultural Research Studies and Re-measured Natural Stands in the United States and Canada</i>	229
Appendix B	
<i>Principle Authors' Addresses</i>	238