

Curriculum Vitae for Jeffrey G. Benjamin

Educational Background:

- 2006 Ph.D. – University of New Brunswick, Fredericton NB
Faculty of Forestry and Environmental Management
Assessing Lumber Grade Recovery Improvement Potential of Black Spruce by Modelling Knot Characteristics
- 1997 B.S. Forest Engineering – University of New Brunswick, Fredericton NB
Faculty of Forestry and Environmental Management
Graduated 1st Division

Professional Experience:

- 2007/10 - Present University of Maine – Cooperative Forestry Research Unit, *Cooperating Scientist*
- 2007/09 - Present University of Maine – Center for Research on Sustainable Forestry, *Cooperating Faculty*
- 2006/01 - Present University of Maine, *Assistant Professor (Timber Harvesting and Forest Roads)*
- 2006/07 - Present University of Maine - Forest Operations Science, *Program Leader*
- 2004/09 - 2004/12 University of New Brunswick, *Forest Engineering Lecturer*
- 2002/04 - 2003/03 University of New Brunswick – Wood Science and Technology Centre, *Research Officer / Project Engineer*
- 2002/01 - 2006/04 University of New Brunswick, *Research Assistant / PhD Candidate*
- 2002/01 - 2005/04 University of New Brunswick, *Teaching Assistant (Wood Science, Silviculture, & Forest Policy)*
- 1997/05 - 2001/10 Forsite Consultants Ltd., *Forest Engineering Project Manager / Road Design Specialist*

Professional Designations:

- 2002 – Present Professional Engineer with the Association of Professional Engineers and Geoscientists of New Brunswick
- 2002 – Present Member of the Canadian Institute of Forestry
- 2006 – Present Member of the Society of American Foresters
- 2006 – Present Member of Council on Forest Engineering

Professional Service:

- 2007 – Present Chair of Forest Products Society – Northeast Section
- 2007 – Present Trucking Efficiency Task Group for Forest Resources Association – Northeastern Region
- 2007 – Present Grant Referee for Natural Sciences and Engineering Research Council of Canada
- 2007 Breakout Session Discussion Leader for Forest Products Association of Nova Scotia: Intensive Forest Management Workshop (March 15, 2007)
- 2006 – 2007 Vice Chair of Forest Products Society – Northeast Section
- 2006 – 2007 President of Forest Resources Association Industrial Forum – Northeastern Region
- 2006 – Present Operations Committee for Forest Resources Association – Northeastern Region
- 2006 – Present Planning Committee for New England Region Council on Forest Engineering

Research Contributions:

Publications

Benjamin, J.G., Y.H. Chui, and S.Y. Zhang 2007. *A method to assess lumber grade recovery improvement potential for black spruce logs based on branchiness*. Forest Products Journal 57(12) 34-41.

Publications In Progress

- Benjamin, J.G., J.A. Kershaw, Y.H. Chui, and S.Y. Zhang. *External knot size and frequency in black spruce trees from three initial spacings*. Target publication: Forest Ecology and Management.
- Benjamin, J.G., J.A. Kershaw, and Y.H. Chui. *Circular distribution of knots in black spruce*. Target publication: Forest Products Journal.
- Benjamin, J.G. and R.J. Lilieholm. *Biomass Harvest Classification System for Maine*. Target publication: Northern Journal of Applied Forestry.
- Benjamin, J.G., R.J. Lilieholm, and D. Damery. *SWOT Analysis of the Northeast Forest BioProducts Industry*. Target publication: **Feature article** in Forest Products Journal.
- Benjamin, J.G. and R. Eckardt. *Forest Biomass Harvesting Capacity in Maine*. Target publication: International

Journal of Forest Engineering.
Benjamin, J.G., and D. Damery (Editors). 2007 Fall Meeting of the Forest Products Society – Northeast Section. *The Northeast Forest Bioproducts Puzzle*.

Professional Presentations

- Benjamin, J.G. 2007. *Effects of Biomass Harvesting on Forest Ecosystems*. **Invited presentation** in Truro, Nova Scotia at a workshop (Intensive Forest Management in the Acadian Forest) sponsored by the Forest Products Association of Nova Scotia. March 15, 2007. (Workshop summary published in Atlantic Forestry Review – May 2007 p48-49).
- Benjamin, J.G. and R.G. Wagner 2007. *Evaluation of Beech Biomass Harvest Systems for Improvement of Low Quality Beech-Dominated Hardwood Stands in Maine*. Project Update for Cooperative Forestry Research Unit Fall Meeting. October 11, 2007.
- Benjamin, J.G. 2006. *Lumber Grade Recovery Improvement Potential*. Presented at the Wood Quality and Utilization Workshop of the Canadian Tree Improvement Association Meeting in Charlottetown Prince Edward Island on July 24, 2006.
- Benjamin, J.G., J.A. Kershaw, Y.H. Chui, and S.Y. Zhang. 2004. *External Knot Characteristics of Black Spruce from Three Initial Spacings*. Presented first in poster format at the Forestry Woodchain Conference (Standing Timber Quality section) in Edinburgh, Scotland on September 28-30, 2004. An improved version of the paper was presented at the Northeastern Mensurationists Organization (NEMO) annual meeting in Connecticut, USA on October 29, 2004.
- Benjamin, J.G. and C. Norfolk 2003. *Student Perspectives on Forestry Education*. Presented at the World Forestry Congress in Quebec City on September 25, 2003 as part of the Forestry Education Section.
- Benjamin, J.G. 2002. *A method for assessing lumber quality over time*. Presented at the Eastern CANUSA Forest Science Conference at the University of Maine on October 19, 2002.

Conferences and Meetings Attended

- 2007/10 2007 Fall Meeting for Northeast Section of Forest Products Society. *The Northeast Forest Bioproducts Puzzle*. **(As Vice-Chair, I organized the entire event (60 participants) and moderated each session (10 speakers))**. Bangor, ME, October 18-19, 2007.
- 2007/10 3RD Forest Engineering Conference. *Sustainable Forest Operations – The Future is Now!* Joint meeting of IUFRO (Division 3) and COFE. Mont-Tremblant, Quebec October 1-4, 2007.
- 2007/03 Forest Resources Association Northeast Region Industrial Forum: *Logging Contractor Economic Health – Views from the Financial Community*
- 2007/03 New England Council on Forest Engineering Annual Meeting (March 12&13, 2007)
- 2007/01 Forest BioProduct Research Initiative – Life Cycle Analysis Workshop
- 2006/12 Forest Resources Association Northeast Region Industrial Forum: *Global Forest Products Markets – Challenges and Opportunities*
- 2006/11 Forest Resources Association Northeast Region Industrial Forum: *Maine Forest Biorefinery and BioProducts Research – Future Opportunities for the Wood Fiber Supply Chain*
- 2006/10 Forest Resources Association Northeast Region Industrial Forum: *Wood Supply Chain Challenges*

Publication and Grant Reviews

- 2007/01 Natural Sciences and Engineering Research Council of Canada – Discovery Grant. The applicant requested funding for two graduate students, equipment, and travel over a five year period.
- 2007/04 RE Consulting, LLC. Renewable Biomass from the Forests of Massachusetts: Forest Harvesting Systems for Biomass Production. Prepared for the Massachusetts Technology Collaborative. June 2007.

Documentation of Research & Training Grants:

Funded Proposals (Total : \$ 200,119)

- Benjamin, J.G. 2007-2011. *Investigation of efficiency, recovery and quality in Maine's forest product supply chain.* Approval granted September 2007 by Maine Agriculture and Forestry Experiment Station.
- Benjamin, J.G., D.J. Mansius, and J. Gunn 2007-2009. *Biomass Harvesting Guidelines for the Acadian Forest.* USDA Natural Resources Conservation Service – Conservation Innovation Grant, **\$21,813.**
- Benjamin, J.G. 2007. *The Northeast Forest BioProducts Puzzle: 2007 Forest Products Society Northeast Section Meeting.* Forest Bioproduct Research Initiative - Research and Educational Outreach Award, **\$3,380.**
- Seymour, R.S., R.J. Lilieholm, and J.G. Benjamin 2007-2009. *Growth, lumber yields, and financial maturity of archetype, isolated Eastern white pine crop trees.* Northeast States Research Cooperative, **\$30,000 (\$25,272 pending for year 2).**
- Benjamin, J.G. and R.G. Wagner 2007-2009. *Evaluation of Beech Biomass Harvest Systems for Improvement of Low Quality Beech-Dominated Hardwood Stands in Maine.* Cooperative Forestry Research Unit, **\$44,176.**
- Benjamin, J.G., R.G. Wagner, and J.S. Wilson 2007-2009. *Biomass Harvest Systems and Work Standards.* Forest Bioproducts Research Initiative, **\$50,000.**
- Wilson, J.S., R.G. Wagner, K. Lausten, and Benjamin, J.G. 2007-2009. *Woody Biomass Availability Following Conventional Harvesting in Maine's Forests.* Forest Bioproducts Research Initiative, **\$50,000.**
- Benjamin, J.G. 2007. *Forest Operations Production Analysis: Use of Handheld Computers to Collect Work Measurement Data.* University of Maine Center for Teaching Excellence, **\$750.**

Collaborative Efforts

Northeast State Foresters Association 2007. A proposal to 1) develop regionally applicable biomass harvest guidelines, and 2) keep “forests as forests” and ensuring their active management, was submitted to the National Forest Restoration Working Partnership Grant Proposal sponsored by USDA Forest Service – State and Private Forestry. I was asked by Alec Giffen (Maine Forest Service Director) to collaborate on the first objective (see attached). Total project budget \$100,000 (\$18,000 allocated for biomass harvest guidelines).

Zhang, S.Y. et al., 2007. An interdisciplinary wood products and wood quality research grant proposal was submitted to the Natural Sciences and Engineering Research Council of Canada. This initiative is designed to develop a species-dependent system to predict various recovery parameters directly using 3-D stem quality attributes and tree / stand characteristics. The grant application seeks to build capacity through training of 6 PhD students, 1 PD, and 1 MS over 5 years. My role is co-advisor to grad students at the University of New Brunswick.