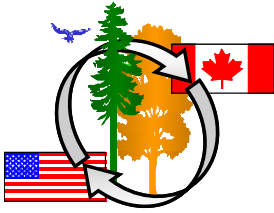


CONFERENCE PROGRAM



Eastern CANUSA Forest Science Conference

October 19-20, 2002

Friday, October 18

Foyer, D.P. Corbett Business Building, University of Maine

7:00-9:00 PM **Ice-Breaker Social (with cash bar)**
Conference registration

Saturday, October 19

Foyer, D.P. Corbett Business Building

7:00-8:00 AM **Registration and continental breakfast**

GENERAL SESSION

Room 100, D.P. Corbett Business Building

Introduction

8:00-8:20 **Dr. Bob Wagner**, *University of Maine* (Moderator)
Dr. Bruce Wiersma, Dean
University of Maine, College of Natural Sciences, Forestry, and Agriculture
Dr. David MacLean, Dean
University of New Brunswick, Faculty of Forestry and Environmental Management

Keynote presentations

8:20-8:50 **The Acadian Forest: A Borderlands Legacy**
8:50-9:00 Q&A **Dr. Richard Judd**, Professor of History, University of Maine, Orono

9:00-9:30 **Economic and Cultural Importance of the Forests to the People of the**
9:30-9:40 Q&A **Region**
Dr. Lloyd Irland, President, Irland Group, Winthrop, ME

9:40-10:00

BREAK

10:00-10:30 10:30-10:40 Q&A	Timberland Investment in the Northeastern US and Eastern Canada: How Does the Northern Forest Stack Up Relative to Other Timber-Producing Regions?		
	Dr. Court Washburn , Director of Investment Strategy and Economics Research, Hancock Timber Resource Group, Boston, MA		
10:40-11:10 11:10-11:20 Q&A	The Changing Role of Protected Areas in Forest Management		
	Dr. Stephen Woodley , Chief Scientist, Parks Canada, Hull, Quebec		
11:20-11:50 11:50-12:00 Q&A	Evolving Forest Practices in the Northeastern US and Canada: The Test of Social Acceptability		
	Dr. Louis Bélanger , Professor, Université Laval, Quebec City, Quebec		
12:00-1:30 PM	LUNCH & POSTER SESSION		
	Wells Commons & Conference Center		
	Participants will join poster authors in a "walk-around" lunch to view and discuss a wide array of poster presentations.		
CONCURRENT TECHNICAL SESSIONS			
D.P. Corbett Business Building			
	<u>Session I</u>	<u>Session II</u>	<u>Session III</u>
	ECOLOGY & WILDLIFE	SILVICULTURE & FOREST PRODUCTION	WOOD PRODUCTS & FOREST OPERATIONS / ENGINEERING
	Room 115	Room 107	Room 117
	Moderator:	Moderator:	Moderator:
	<i>Dr. John Hagan</i>	<i>Dr. Ted Needham</i>	<i>Dr. Steve Shaler</i>
1:30-1:50 PM	Assessing vertebrate species risk associated with industrial forest management - Jeff W. Higdon, David A. MacLean, John M. Hagan and J. Michael Reed	Improvement cutting in degraded northern hardwoods: Results of a 30-year replicated field experiment in upstate New York - Anne L. Barlow and Christopher A. Nowak	Improving the pallet bending strength by alternative design - Michael Albright and Nader Naderi
1:50-2:10	Effects of precommercial thinning on small mammals in northern Maine - Jessica A. Homyack, Daniel J. Harrison, and William B. Krohn	Predicting understory American beech development after partial cutting in uneven-aged northern hardwoods - Kimberly K. Bohn and Ralph D. Nyland	Effects of the planer knife jointing on the secondary wood manufacturing - Nader Naderi

	<u>Session I</u> Room 115	<u>Session II</u> Room 107	<u>Session III</u> Room 117
2:10-2:30	Effects of precommercial thinning on abundance of snowshoe hare in northern Maine - Jessica A. Homyack, Daniel J. Harrison, and William B. Krohn	Management of understory American beech by two mechanical control methods - Amy L. Bashant and Ralph D. Nyland	A model for assessing lumber recovery and quality over time - Jeff G. Benjamin, Y. H. Chui, S. Y. Zhang, and Shinji Fujiwara
2:30-2:50	Avian response to removal of a forest dominant: Consequences of hemlock woolly adelgid infestations - Morgan W. Tingley, David A. Orwig, Rebecca Field, and Glenn Motzkin	The influence of inter- and intra-specific competition on growth of white pine, red pine, and Norway spruce - Diane Kiernan and Eddie Bevilacqua	Assessing the feasibility and profitability of cut-to-length harvests in eastern hardwoods - Chris B. LeDoux
2:50-3:10	Local and landscape habitat use by woodpeckers in an industrial forest - Tara Warren, Antony W. Diamond, and Graham J. Forbes	Shelterwood cutting method in a coniferous stand in NW New Brunswick: 5-year results of regeneration and residual stand - Jean-Marie Binot, Dominique Boucher, and Luc Lavoie	Terminal harvesting in northern New England - Isaac Annis and Andy Egan
3:10-3:30	BREAK		
	<u>Session I</u> ECOLOGY & WILDLIFE <i>Cont'd</i> Room 115 Moderator: <i>Dr. Fred Servello</i>	<u>Session II</u> SILVICULTURE & FOREST PRODUCTION <i>Cont'd</i> Room 107 Moderator: <i>Mr. Brendan Hemens</i>	<u>Session III</u> FOREST MANAGEMENT, PLANNING, & POLICY Room 117 Moderator: <i>Dr. Andy Egan</i>
3:30-3:50	Factors associated with the local extirpation of a disturbance-dependant bird - David I. King and Richard M. DeGraaf	Effects of shelterwood cutting on regeneration, weed control and growth of residuals in a fir-spruce softwood stand: 9-year results - Jean-François N. Morin and Jean-Marie Binot	Using analyses of natural and human-caused forest disturbance on the J.D. Irving Ltd. Black Brook district to inform forest and biodiversity management - David A. MacLean, et al.

	<u>Session I</u> Room 115	<u>Session II</u> Room 107	<u>Session III</u> Room 117
3:50-4:10	Effects of harvested canopy gaps on forest amphibians - Carol A. Strojny and Malcolm L. Hunter, Jr.	Differential growth responses in mature eastern white pine following partial cutting treatments - Eddie Bevilacqua	Importing the Landscape Management System to the Northeast - Jeremy S. Wilson
4:10-4:30	Characterizing the effects of forest gaps on parasitic <i>Hymenoptera</i> - Kristopher J. Abell and Stephen A. Woods	Diameter-limit versus selection cutting in northern conifers - Laura S. Kenefic, Paul E. Sendak, John C. Brissette, Kerry A. Sokol, and Michael M. Greenwood	Is patch retention working? - Andrew Whitman and John H. Hagan
4:30-4:50	The effects of clearcut harvest and herbicide treatments on flowering plant and wingless wasp communities - Stephen A. Woods, Kathryn Georgitis, and Andrew P. Cyr	Developing metrics for 3-dimensional forest stand structure: A test of the stand complexity index hypothesis - Mike R. Saunders, Robert G. Wagner, and John Brissette	Implementing an international forest community classification in the northern Appalachian-Acadian region - Sean Basquill, Ken Baldwin, and Mark Anderson
4:50-5:10		Effect of age on growth of red spruce and eastern hemlock in multi-aged stands - Robert S. Seymour and Laura S. Kenefic	
Conference attendees on their own for dinner			

Sunday, October 20

7:00-8:00 AM **Continental breakfast** (Foyer, D.P. Corbett Business Building)

CONCURRENT TECHNICAL SESSIONS Cont'd

D.P. Corbett Business Building

	<u>Session I</u> ECOLOGY & WILDLIFE Room 115 Moderator: <i>Dr. Graham Forbes</i>	<u>Session II</u> SILVICULTURE & FOREST PRODUCTION Room 107 Moderator: <i>Dr. Dave MacLean</i>	<u>Session III</u> FOREST MANAGEMENT, PLANNING, & POLICY Room 117 Moderator: <i>Dr. Jeremy Wilson</i>
8:00-8:20	Old-growth forests as reservoirs of genetic diversity and reproductive fitness - Alex Mosseler, John E. Major and Om P. Rajora	Korean pine-broadleaf forests of the Russian far east: Toward a silvicultural comparison with white pine analogs in eastern North America - Herrick S. Fox and Anatoliy I. Kudinov	Identifying physical factors important to modeling soil erosion vulnerability of forested areas in Maine using the Delphi technique - Stephanie Arnold Phillips and Andy Egan
8:20-8:40	Vegetation diversity in natural gaps, harvested gaps, and closed canopy in the Acadian forest, Maine - Darci A. Schofield and Robert G. Wagner	Effect of precommercial thinning on balsam fir resistance to windthrow - Jean-Claude Ruel, Alexis Achim, Barry A. Gardiner, and Catherine Larouche	Working too close to the stump: Rural poverty, environmental justice and forest management in Maine and eastern Canada - Katherine E. Albert
8:40-9:00	Herbaceous layer composition in a forested watershed: Implications for forest management - Mark R. Roberts, Katherine A. Frego, and Angela M. Hovey	Long-term effect of herbicides and precommercial thinning on the composition and structure of Maine spruce-fir stands - R. Howard Daggett, Robert G. Wagner, and Maxwell L. McCormack, Jr.	Nonindustrial private forest landowners of the northern forest - Brett J. Butler
9:00-9:20	Moss distributions in industrial and old-growth forests in Maine - Everose N. Schlüter and J. Michael Reed	Projected response of spruce-fir stands to commercial thinning in Maine - Dawn M. Opland, Robert G. Wagner, Robert S. Seymour, and Dan McConville	Measures of Maine community dependence on the forest sector - Meghan E. Cummings, Debra Straussfogel, and Theodore E. Howard

9:20-9:40	BREAK		
	<u>Session I</u> Room 115	<u>Session II</u> Room 107	<u>Session III</u> Room 117
9:40-10:00	Forest soil N dynamics at a paired watershed experiment in Maine - S.S. Shah, I.J. Fernandez, L.E. Rustad, and D.B. Dail	Impact of stand density management on product quality and financial returns in the S-P-F species - S.Y. Zhang and G. Chauret	Examining the macroeconomic factors that affect clearcutting in Canadian forests - Van A. Lantz
10:00-10:20	Evidence of Ca depletion in forest soils at Bear Brook Watershed in Maine (BBWM) - Johanna E. Szillery, Ivan J. Fernandez, Stephen A. Norton, Alan S. White, and Lindsey E. Rustad	Biochemical and physiological markers of environmental stress in forest trees - R. Minocha and S. Long	The land-use history and stand dynamics of Monhegan island - Richard Dyer and William H. Livingston
10:20-10:40	Black spruce cone depredation by red squirrels in eastern Newfoundland - Kirby A. Tulk and Graham J. Forbes	Rooting differences between red spruce and balsam fir - Suzhong Tian and William D. Ostrofsky	Current status of eastern white pine (<i>Pinus strobus</i> L.) in Kouchibouguac National Park - Edwin Swift
10:40-11:00	A model of a red oak using Lindenmayer systems - Anthony Trani and Thomas H. Meyer	Root system development in the nursery affects performance of coniferous seedlings - Marek J. Krasowski	Genetic variation in wood decay resistance of white spruce (<i>Picea glauca</i> (Moench) Voss) - Qibin Yu, Diang-Qing Yang, and S.Y.Zhang
11:00-11:50	CONFERENCE WRAP-UP SESSION Room 100, D.P. Corbett Business Building <u>Speakers</u> <i>Silviculture & Production</i> - Si Balch , MeadWestvaco <i>Ecology & Wildlife</i> – John Hagan , Manomet Conservation Sciences <i>Forest Management & Operations</i> – Blake Brunsdon , JD Irving		
12:00-1:00	BANQUET LUNCH Wells Commons & Conference Center (Tickets required)		



Poster Presentations

Wells Commons & Conference Center

Ecology & Wildlife

Influences of landscape pattern on forest birds: A species-centered approach

M. Betts, G. Forbes, and A.W. Diamond

Optimal canopy conditions for carbon gain in sapling red spruce: Applying a process model to on-site microclimate data

Michael E. Day and Alan S. White

Vegetation of forested uplands in the Massabesic Experimental Forest, southern Maine, U.S.A.

Alison C. Dibble, Catherine A. Rees, Paul E. Sendak, and John C. Brissette

Relative flammability of invasive exotic and native plants of the northeastern U.S.

Alison C. Dibble, Catherine A. Rees, William A. Patterson III, and Robert H. White

Spatial and temporal patterns of natural disturbance in old-growth forests of northern Maine

Shawn Fraver and Alan S. White

Water temperature changes in small headwater streams before and after harvesting

John M. Hagan, Ethel Wilkerson, Darlene Siegel, and Andrew A. Whitman

Relational database of down dead wood sampled in Maine, New Hampshire, and Vermont

Linda S. Heath and Joseph T. Hempfling

Predicting habitat supply for American marten using measures of landscape composition and configuration

Jeffrey A. Hepinstall, Daniel J. Harrison, David C. Payer, and Angela K. Fuller

A sighting probability assessment of a double count aerial survey technique for white-tailed deer (*Odocoileus virginianus*) in New Brunswick, Canada

Mark A. McGarrigle, John A. Kershaw, Jr., Roderick Cumberland, and Graham Forbes

Disturbance regimes in mixedwood stands from different topographic settings

Erika L. Rowland and Alan S. White

Leave patches as refugia for vascular plants in harvest blocks

Jolan Sulinski, Mark R. Roberts, Tanya R. Borgal, and Abby M. Pond

Forest Management, Planning, & Policy

New Brunswick triad case study: Implement harvesting inspired by natural disturbance

Adam R. Dick, David A. MacLean, and Chris R. Hennigar

A cross-cultural study of occupational choice and prestige among loggers

Andrew Egan and Deryth Taggart

Use of 1946 aerial photographs to characterize forest change in northwestern New Brunswick

David A. Etheridge, David A. MacLean, and Brendan Hemens

Simulating the characteristics of a forest landscape disturbed by spruce budworm outbreaks

Brendan Hemens and David A. MacLean

Road information system for the University of New Brunswick forest land

D. Jaeger and M. Baldwin

Efficient stand-level inventory predictions using multiple imputation models

John A. Kershaw, Jr.

Multitemporal Ikonos and Landsat ETM+ satellite data use in determining forest regeneration stand conditions

Jacob W. Metzler and Steven A. Sader

Triad approach to forest management: Land use zoning in northern New Brunswick

Michael K. Montigny and David A. MacLean

Forest change and fragmentation comparisons using Terra MODIS and Landsat ETM+ imagery

Steven A. Sader, Daniel J. Hayes, Silvia Cordero Sancho, and Daniel Irwin

RGB-NDMI: A simple, accurate and efficient forest change detection method using time-series Landsat satellite imagery

Steven A. Sader, Suming Jin, Jacob Metzler, and Chris Rado

Silviculture & Forest Production

Adaptive research: Revising a long-term silviculture experiment

John C. Brissette and Laura S. Kenefic

Supplemental controlled-release fertilization of coniferous seedlings in the nursery - Effects on morphology and frost hardening

Joanna Carlisle, Marek J. Krasowski, and Edwin Stinson

Impact of residual trees on hardwood stand growth and yield following clearcutting

Lyle Dinn, Ted Needham, and Neville Peasley

White pine (*Pinus strobus*) decline and mortality associated with shallow rooting-depth potential

Megan Fries, William H. Livingston, Stephen Howell, Clark Granger, Henry Trial, and David Struble

Modified diameter-limit cutting: Silviculture or exploitation?

Laura S. Kenefic, Paul E. Sendak, and John C. Brissette

USDA Forest Service research on the Penobscot Experimental Forest

Laura S. Kenefic, Timothy L. Stone, and John C. Brissette

Leaf area models for and leaf area trends in *Pinus strobus* L. in Maine

Micah D. Pace and Robert S. Seymour

Crop tree growth twenty-five years after precommercial thinning in a northern conifer stand

Leah M. Phillips, Robert S. Seymour, and Laura S. Kenefic

FERP: Designing and understanding silvicultural systems for the future

Mike R. Saunders, Robert G. Wagner, Malcolm Hunter, Steve Woods, Darci Schofield, Carol Strojny, Shelly Thomas, Shawn Fraver, and Lance Case

Decline of balsam fir and its relation to natural disturbance and abiotic factors in New Brunswick: The role of indirect effects

Sarah L. Taylor and David A. MacLean

Cooperative Forestry Research Unit

Robert G. Wagner and Daniel J. McConville

Maine's Commercial Thinning Research Network

Robert G. Wagner, Robert S. Seymour, and Daniel J. McConville

Wood Products & Forest Operations/Engineering

Causes and costs of unused logging capacity among loggers in northern New England

Andrew F. Egan, Isaac Annis, Dale Greene, Jeff Mayo, and Niels de Hoop

Shovel logging in a deferment harvest: Soil bulk density and residual stand effects

Andy Egan, R. Hicks, K. Waldron, and J. Skousen

Ground skidding and harvested stand attributes in Appalachian hardwood stands

Andrew F. Egan and John E. Baumgras

Factors affecting BMP compliance in Maine: A survey of foresters and loggers

Stephanie Arnold Phillips and Andy Egan

Occupational choice among loggers in Maine's northern forest and southern counties

Deryth Taggart and Andy Egan

Effects of fertilization on growth increment and wood physical-mechanical properties of young slash pine

Youming Xu, Tony Zhang, Han Lin, and Yiquan Li