

Fredericton New Brunswick Canada April 26 - 28, 2016

# Advanced Forest Vegetation Management

## 3days

North America's top Forest Vegetation Management Experts & Risk Management Strategists come together to provide your employees with state-of-the-art knowledge and skills that are needed in today's world.

**Don't miss out. Book your seat NOW!**



Knowledge

Caring

Science

Socio-Economic Impacts



Facts

Public Perceptions

Training

Risk Assessment & Management

# Course Objectives

Participants completing this course will understand:

- The principles of forest vegetation management
- The role of herbicides in promoting successful forest regeneration
- The effects of plant competition on the growth and development of forest stands
- Types and formulations of herbicides available for forest vegetation management
- How to select the most effective herbicide to meet a specific silvicultural objective
- The latest research on environmental fate of herbicides in the forest environment
- Principles of toxicology related to forest herbicides
- The most recent understanding on the effects of herbicides on forest wildlife and wildlife habitat
- State-of-the-art techniques on how to most effectively apply herbicides and protect the environment
- Principles of risk perception and how to engage in successful risk communication with the public
- Advanced integrated forest vegetation management and alternatives to herbicides
- How to develop a successful forest vegetation management plan using herbicides and the alternatives

Each course participants will receive a certificate that shows that you have obtained the most comprehensive training available and demonstrated the skills necessary to practice forest vegetation management.

**Continuing Forestry Education Credits: 23**

**Pesticide Licensing Credits: 18**

Enrollment is **limited to 30 people** on a first-come-first-serve basis. We must have your application in hand and payment received in order to guarantee your spot on this course.

## **FUNDING OPPORTUNITIES FOR TRAINING**

New Brunswick attendees may be eligible for funding under the Canada-New Brunswick Job Grant Program. Please visit <http://tinyurl.com/mcftjobgrant> to learn more. Employers must apply for this and not the employee. MCFT can help you in this application process and with the final report if your funding request is approved.

# Day 1, April 26th

DATE	TIME	MODULE	TOPIC	INSTRUCTOR
Tuesday, April 26	7:45 – 8:30 AM	<b>NUTRITION BREAK—CATERED (included in tuition)</b>		
	8:30 – 9:00 AM	Introduction	<b>Course Objectives and Schedule</b>	<ul style="list-style-type: none"> <li>• Dr. Robert Wagner, U of M CFRU</li> <li>• Kirk MacDonald, P. ENG, NB DNR</li> </ul>
	9:00 – 10:30 AM	1	<b>Principles of Forest Vegetation Management</b> <ul style="list-style-type: none"> <li>• Silvicultural context</li> <li>• Principles of plant competition</li> <li>• Effects on long-term stand development</li> <li>• Costs and benefits</li> <li>• Site selection considerations</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Robert Wagner, U of M CFRU</li> <li>• Dr. Doug Pitt, NRC</li> </ul>
	10:30 – 11:00 AM	<b>NUTRITION BREAK—CATERED (included in tuition)</b>		
	10:30 – 11:30 AM	2	<b>Physical &amp; Chemical Properties of Herbicides</b> <ul style="list-style-type: none"> <li>• Types</li> <li>• Formulations</li> <li>• Absorption and translocation</li> <li>• Modes and mechanisms of action</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Dean Thompson, NRC</li> </ul>
	11:30 – 12:30 PM	<b>LUNCH CAFETERIA (included in tuition)</b>		
	12:30 – 2:30 PM	3	<b>Herbicide Prescriptions, Efficacy, &amp; Diagnosis</b> <ul style="list-style-type: none"> <li>• Herbicide selection</li> <li>• Rate and timing (site prep, release)</li> <li>• Surfactants</li> <li>• Total application volume choices</li> <li>• Selectivity and crop tolerance</li> <li>• Silvicultural efficacy</li> <li>• Diagnosing problems and causes</li> </ul>	<ul style="list-style-type: none"> <li>• Ron Lemin, CPS</li> <li>• Milo Mihajlovich, MMCS</li> </ul>
	2:30 – 3:00 PM	<b>TRAVEL TIME TO SITE (included in tuition)</b>		
	3:00 – 5:00 PM	IFVM Plan	<b>Field site visit - Start IFVM plan:</b> <ul style="list-style-type: none"> <li>• Group exercise to develop comprehensive IFVM work plan for a specific forest site</li> </ul>	<ul style="list-style-type: none"> <li>• Jasen Golding, BSc, BScF, UNB</li> </ul>
	6:30 – 9:00 PM	<b>SOCIAL &amp; DINNER</b>		

# Day 2, April 27th

DATE	TIME	MODULE	TOPIC	INSTRUCTOR	
Wednesday, April 27	7:45 – 8:30 AM		<b>NUTRITION BREAK—CATERED (included in tuition)</b>		
	8:30 – 9:30 AM	4	<b>Herbicide Application Technology</b> <ul style="list-style-type: none"> <li>• Methods of application (aerial and ground-based)</li> <li>• Sprayer calibration</li> <li>• Nozzles, speed, release height (best practices)</li> <li>• Batching</li> </ul>	<ul style="list-style-type: none"> <li>• Milo Mihajlovich, MMCS</li> </ul>	
	9:30 – 10:00 AM		<b>NUTRITION BREAK—CATERED (included in tuition)</b>		
	10:30 – 12:00 PM	5	<b>Quality Assurance &amp; Risk Mitigation</b> <ul style="list-style-type: none"> <li>• Minimizing drift</li> <li>• Drift models</li> <li>• GIS data uploads for application navigation</li> <li>• Onboard "real-time" GPS navigation and boom on/off data recording</li> <li>• Site management and security</li> </ul>	<ul style="list-style-type: none"> <li>• Lead - Milo Mihajlovich, MMCS</li> <li>• Panel: Peter Amirault, FPL Ron Lemin, CPS, Mike Cunningham, EA, Renaud Bordage, JDI</li> </ul>	
	12:00 – 1:00 PM		<b>LUNCH CAFETERIA (included in tuition)</b>		
	1:00 – 2:00 PM	6	<b>Federal &amp; State/Provincial Regulations</b> <ul style="list-style-type: none"> <li>• The rule and regulation making process</li> <li>• Effective ways to protect riparian zones and other sensitive areas</li> <li>• Public notifications</li> <li>• Trends in regulation</li> </ul>	<ul style="list-style-type: none"> <li>• John Antworth, NBDELG</li> <li>• Gary Fish, Maine BPC</li> </ul>	
	2:00 – 4:15 PM (includes 15 min break)	7	<b>Toxicology &amp; Risk Assessment</b> <ul style="list-style-type: none"> <li>• Human</li> <li>• Animal</li> <li>• Role in pesticide registration process</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Leonard Ritter, U of G</li> </ul>	
	5:00 – 6:00 PM		<b>DINNER—CAFETERIA (included in tuition)</b>		
	6:00 – 8:00 PM		<b>IFVM Group Work</b>		<ul style="list-style-type: none"> <li>• Jasen Golding, UNB</li> </ul>

# Day 3, April 28th

DATE	TIME	MODULE	TOPIC	INSTRUCTOR
	7:45 – 8:30 AM		<b>NUTRITION BREAK—CATERED (included in tuition)</b>	
	8:30 – 10:00 AM	8	<b>Environmental Fate and Effects of Herbicides</b> <ul style="list-style-type: none"> <li>• Aquatic</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Dean Thompson, NRC</li> </ul>
	10:00 – 10:15 AM		<b>NUTRITION BREAK—CATERED (included in tuition)</b>	
	10:15 – 12:15 PM	9	<b>Wildlife and Wildlife Habitat Effects</b> <ul style="list-style-type: none"> <li>• Terrestrial</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Vickie Tatum, NCASI</li> </ul>
	12:15 – 1:00 PM		<b>LUNCH CAFETERIA (included in tuition)</b>	
	1:00 – 2:30 PM	10	<b>Integrated Forest Vegetation Management &amp; Alternatives to Herbicides</b> <ul style="list-style-type: none"> <li>• Principles of plant autecology and making vegetation management decisions</li> <li>• Alternatives to herbicides and their effectiveness/impacts</li> <li>• Elements of cost comparisons</li> <li>• The Quebec experience and emerging challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Nelson Thiffault, MFFPQ</li> </ul>
	2:30 – 2:45 PM		<b>NUTRITION BREAK—CATERED (included in tuition)</b>	
	2:45 – 4:45 PM	11	<b>Risk Communications</b> <ul style="list-style-type: none"> <li>• Public perceptions of risk</li> <li>• Social acceptance thresholds</li> <li>• Roles and responsibilities of applicators (professionalism)</li> <li>• Media relations</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. William Leiss, U of O</li> <li>• Chrystiane Mallaley, NATIONAL</li> </ul>
	5:00 – 6:00 PM		<b>DINNER—CAFETERIA (included in tuition)</b>	
	6:00 – 7:00 PM		<b>IFVM Plan Reporting</b>	<ul style="list-style-type: none"> <li>• Jasen Golding, UNB</li> </ul>

Thursday, April 28

# Presenters

In order of appearance

NAME	AFFILIATION	BIO
 <p>DR. ROBERT WAGNER</p>	<p>University of Maine</p>	<ul style="list-style-type: none"> <li>• Henry W. Saunders Distinguished Professor in Forestry</li> <li>• Director, Center for Research on Sustainable Forests (CRSF) &amp; Cooperative Forestry Research Unit (CFRU)</li> </ul> <p>Previously:</p> <ul style="list-style-type: none"> <li>• Director, School of Forest Resources, University of Maine, Orono</li> <li>• Associate Director, Forest Bioproducts Research Institute (FBRI)</li> <li>• Professor of Silviculture, School of Forest Resources, University of Maine, Orono,</li> <li>• Cooperating Scientist, U.S. Forest Service, Northern Research Station.</li> </ul>
 <p>DR. DOUG PITT</p>	<p>Natural Resources Canada</p>	<ul style="list-style-type: none"> <li>• Research Scientist, Quantitative Silviculture, Canadian Wood Fibre Centre, Canadian Forest Service.</li> <li>• Adjunct professor of Silviculture and Biometrics, Lakehead University and University of Alberta.</li> <li>• Honorary Research Associate, School of Graduate Studies, University of New Brunswick.</li> </ul> <p>Previously:</p> <ul style="list-style-type: none"> <li>• Advisor to the Canadian Ecology Centre – Forestry Research Partnership.</li> <li>• Operations Forester and Forest Protection Supervisor, J.D. Irving Limited.</li> </ul>
 <p>DR. DEAN THOMPSON</p>	<p>Natural Resources Canada</p>	<ul style="list-style-type: none"> <li>• Research Scientist Environmental Chemistry and Ecotoxicology</li> <li>• BSc (Wilfrid Laurier University), MSc and Ph.D. (University of Guelph)</li> <li>• Previously Adjunct professor - Lake Superior State University, University of Guelph and University of New Brunswick – Saint John</li> <li>• Associate Graduate Faculty – University of Guelph and University of New Brunswick – Saint John</li> <li>• Past member of the Society of Environmental Chemistry and Toxicology, American Chemical Society, International Union of Forest Research Organizations and Canadian Amphibian and Reptile Conservation Network</li> <li>• Associate Editor – Canadian Journal of Forest Research (1993-1999)</li> </ul>

# Presenters

In order of appearance

NAME	AFFILIATION	BIO
 <p>RON LEMIN</p>	<p>Crop Production Services - Timberland Division</p>	<ul style="list-style-type: none"> <li>• Vegetation Management Consultant</li> </ul>
 <p>MILO MIHAJLOVICH</p>	<p>Mihajlovich Enterprises Ltd</p>	<ul style="list-style-type: none"> <li>• Vegetation Management Consultant</li> </ul>
 <p>JASON GOLDING, BSc, BScF</p>	<p>University of New Brunswick</p>	<ul style="list-style-type: none"> <li>• Forest Operations Program Manager</li> </ul>
 <p>PETER AMIRAULT, MScF, BScF</p>	<p>Forest Protection Ltd</p>	<ul style="list-style-type: none"> <li>• Operations Manager</li> </ul> <p>Previously:</p> <ul style="list-style-type: none"> <li>• Forest Insect &amp; Disease Specialist with Forestry Canada</li> <li>• Research Assistant at UNB</li> <li>• Forester with Georgia Pacific</li> </ul>
 <p>MICHAEL CUNNINGHAM, BScFE</p>	<p>Engage Agro</p>	<ul style="list-style-type: none"> <li>• Vegetation Management Specialist</li> <li>• Forestry Business &amp; Account Manager</li> </ul>

# Presenters

In order of appearance

NAME	AFFILIATION	BIO
<p>RENAUD BORDAGE</p>	<p>Forest Patrol LTD &amp; JD Irving Ltd</p>	<ul style="list-style-type: none"> <li>• Chief Pilot</li> <li>• Operations Manager</li> </ul>
 <p>JOHN ANTWORTH</p>	<p>New Brunswick Department of Environment and Local Government</p>	<ul style="list-style-type: none"> <li>• Environment and Local Government Officer for Remediation and Materials Management</li> </ul>
 <p>GARY FISH</p>	<p>State of Maine Department of Agriculture, Conservation and Forestry, Board of Pesticides Control</p>	<ul style="list-style-type: none"> <li>• Pesticide Programs Manager</li> </ul>
 <p>DR. LEONARD RITTER</p>	<p>University of Guelph</p>	<ul style="list-style-type: none"> <li>• Professor Emeritus (toxicology), University of Guelph</li> <li>• Adjunct Professor (toxicology), Chulabhorn Research and Graduate Institutes, Bangkok, Thailand</li> <li>• Member, United Nations WHO Joint Expert Committee on Food Additives</li> <li>• Chair, PMRA Lindane Board of Review</li> <li>• Chair, Council of Canadian Academies Expert Panel on the Integrated Testing of Pesticides</li> <li>• Member, US EPA Human Studies Review Board</li> <li>• Chair, PMRA External Advisory Panel on Essential Oil-based Personal Insect Repellents</li> </ul>



# Presenters

In order of appearance

NAME	AFFILIATION	BIO
DR. VICKIE TATUM	National Council for Air and Stream Improvement, Inc.	<ul style="list-style-type: none"> <li>Program Manager and Scientist with NCASI's Health Effects Program since 1993. She holds a B.S. in agriculture and a Ph.D. in toxicology, both from the University of Kentucky. Her primary responsibilities are in the area of human health effects.</li> </ul>
 DR. NELSON THIFFAULT	Direction de la recherche forestière, Ministère des Forêts, de la Faune et des Parcs du Québec (Forest Research Branch, Quebec Ministry of Forests, Wildlife and Parks)	<ul style="list-style-type: none"> <li>Research Scientist, regeneration silviculture, ecology, ecophysiology</li> <li>Adjunct Professor, Université Laval, Université de Sherbrooke, Université du Québec en Abitibi-Témiscamingue, Université du Québec à Chicoutimi</li> <li>Regular Member, Centre for Forest Research</li> </ul>
 DR. WILIAM LEISS	McLaughlin Center for Population Health Risk Assessment, University of Ottawa	<ul style="list-style-type: none"> <li>Research Scientist</li> <li>Fellow and Past-President (1999-2001) of the Royal Society of Canada</li> <li>Officer in the Order of Canada.</li> <li>1999 to 2005 held the NSERC/SSHRC Research Chair in Risk Communication and Public Policy in the Haskayne School of Business, University of Calgary</li> <li>1994 to 1999 he held the Eco-Research Chair in Environmental Policy at Queen's University, Kingston, Ontario.</li> </ul>
 CHRYSTIANE MALLALEY BSc Biology, General	NATIONAL	<ul style="list-style-type: none"> <li>Chrystiane leads NATIONAL PR's public engagement practice in Atlantic Canada. She provides advice to private and public sector clients on the design and implementation of innovative and comprehensive strategies to communicate with, meaningfully engage, and build trust with stakeholders. The scope of her work includes major infrastructure projects, municipal planning, as well as the energy and natural resources sectors.</li> </ul>

