



2018 National Canadian Land Reclamation Association Conference and AGM

2018 Atlantic Reclamation Conference ARC 2018

## *Planning for the Annual 100 Year Event*

### **Conference Program Overview**

### **Technical Program at- a- Glance**

Monday October 15, 2018

Time	Activity	Location	Details
10:30 and 10:45 to arrange car pools. 11:00 am sharp- Leave for tour. 11 am-4pm Mine Tour	Brunswick Mine Tour	Meet at NBCC Main entryway (by the big parking lot).	Lunch Included – limited spaces; must register in advance
3pm-	Rodd Inn check in open		
7pm-9pm	Meet and Greet Reception	Rodd Inn	Hor d' oeuvres provided; cash bar; Conference Registration will be open.

Tuesday, October 16, 2018

Time	Activity	Location	Details
8am-5pm	Registration Open	NBCC Miramichi Campus, Main Building	Parking available in big lot Registration in Foyer
8:30 am- 8:55am	Conference Opening- 8:30- 8:40 CLRA Host Chapter 8:40- 8:45 First Nations Welcome 8:45- 8:55 President -CEO, NBCC	Room A-1145	Welcoming Speeches Frank Potter; CLRA Atlantic Chapter President Elder Tulley Paul ;Metepenagiag Mi'kmaq Nation Marilyn Luscombe; President and CEO, NBCC
8:55 am – 10:15am	Session 1 Opening Plenary	Room A-1145	
10:15 am - 10:45 am	Morning Break/ Sponsor Booths	Foyer	Refreshments provided
10:45 am -12:15 am	Technical Sessions	Session 2 Room A-1145	Session 3 Room A-1125
12:15 am – 1:15pm	Lunch Break/ Poster Viewing	Room A-2232	Lunch served
12:30 pm – 1:00 pm	Lunch and Talk- Dr. Bob Darmody <i>Reclamation of Prime Agricultural Farmlands in Illinois: Success After 40 years?</i>	Room A-1145	Bring your lunch from room A-2232. Dr. Darmody is a Professor Emeritus in Soil Science and the current Executive Director of the American Society of Mining and Reclamation
1:15 pm – 2:45pm	Technical Sessions	Session 4 Room A-1145	Session 5 Room A-1125
2:45 pm – 3: 15 pm	Afternoon Break/ Sponsor Booths	Foyer	Refreshments provided.
3:15 pm- 4:45 pm	Technical Sessions	Session 6 Room A-1145	Session 7 Room A-1125
6 pm -7pm	Reception	Rodd Inn	Cash bar
7pm-9pm	Awards Banquet- MC -Frank Potter Welcome and Awards- Andrea McEachern Guest Speaker- Mr. Manford Wasson	Rodd Inn	Banquet ticket required; included with full registration. Extra tickets may be purchased. Andrea McEachern; CLRA National President  Guest Speaker Mr. Manford Wasson; “ <i>Early Settlement History of the Miramichi Area</i> ”

## Wednesday, October 17, 2018

Time	Activity	Location	Details
8am-5pm	Registration Open	NBCC Miramichi Campus, Main Building	Parking available in big lot Registration in Foyer
8:20- 8:30 am	Housekeeping Notes	Room A-1145	
8:30 am – 10:00am	Technical Sessions	Session 8 Room A-1145	Session 9 Room A-1125
10:00 am - 10:30 am	Morning Break/ Sponsor Booths	Foyer	Refreshments provided
10:30 am -12:00 pm	Technical Sessions	Session 10 Room A-1145	Session 11 Room A-1125
12:00 am – 1:15 pm	Lunch Break / Poster Viewing	Room A-2232	Lunch served
12:15 pm – 1:00 pm	Lunch and CLRA National AGM. Open to all CLRA members. Student Presentation awards.	Room A-2234	Chair Andrea McEachern; CLRA National President. Bring your lunch and participate in the CLRA National Annual General Meeting.
1:15 pm – 2:45pm	Technical Sessions	Session 12 Room A-1145	Session 13 Room A-1125
2:45 pm – 3:15 pm	Afternoon Break/ Sponsor Booths	Foyer	Refreshments provided
3:15 pm- 4:45 pm	Technical Sessions	Session 14 Room A-1145	Session 15 Room A-1125
4:45 pm- 5:00 pm	Closing Comments	Room A-1145	Frank Potter
6 pm -8pm	Dinner	O'Donaghue's Irish Pub; Water Street	On your own for payment but reservations have been made for CLRA attendees. Please indicate attendance on sign-up sheet at registration.

## Thursday, October 18, 2018

Time	Activity	Location	Details
8:30- 8:45am Gather for directions. 9:00 am sharp Vehicles leave for tour 9am- 2pm Bog tour	Sungro peatland restoration tour; Birch Ridge, NB  Travel in personal vehicles	Meet at NBCC Miramichi Campus parking lot; this is the final event of the conference.  Drive to Birch Ridge, NB	Lunch provided. Please register for trip prior to conference  Attendees can travel home from the restoration site.
2pm	Conference adjourned.		

## Technical Program-at-a-Glance Day 1 CLRA-ARC 2018, Miramichi, NB

Time	Tuesday, October 16	
8:00	Registration	
8:30	Conference Opening	
Session 1 - Opening Plenary (OP)		
8:55	Capozi - Climate Change Projections and Anticipated Impacts to New Brunswick	
9:35	Baechler - Thoughts on Reclamation Planning in Cape Breton’s Changing Climate	
10:15	Morning Break	
Session 2 - Environmental Monitoring (EM)		Session 3 - Mine Reclamation (MR)
10:45	Skinner - eDNA Solutions for Species Detections in Tidal Energy Environmental Effects Monitoring	Darmody - American Society of Mining and Reclamation: National and International Activities
11:15	Chaudhary - Monitoring Effects of Pulpmill Effluents on Marine Sediments and Biota (student presentation)	Meiers - Progressive Mine Reclamation... Enhancing This Practice to Include Mine Rock Dump Design
11:45	Quanz - Effects of Waterbourne Effluent on Wetlands Surrounding an Industrial Waterwater Treatment Facility (student presentation)	Parker - Is There a Better way? Reconsidering Our Remediation Approach by Evaluating Sustainability: Summit Waste Rock, Scotchtown, Cape Breton, NS
12:15	Lunch & Talk by Bob Darmody (Reclamation of Prime Agricultural Farmlands in Illinois: Success After 40 Years?)	
Session 4 - Aquatic Habitat Restoration (AQ)		Session 5 - Greening Mine Sites (GM)
13:15	Jenkins - Reshaping the Oxbow: A Large-Scale Bank Restoration	Hewitt - Results of the Tundra Mine, NT, Revegetation Trial Using Locally Harvested Pioneer Species Instead of Grass Seed and Fertilizer
13:45	Currie - McIntosh Brook Fish Habitat Restoration Project	Hewitt - Update on the Bioengineering Techniques for Revegetation of Riparian Areas at the Colomac Mine, NT: Seven Years Later
14:15	Torenvliet - Restoration of Fish Passage at Two Orphaned, Low-Head Dams in New Brunswick	Thomson - An Ingenious Way to Control Weeds on your Next Reclamation Site

## Technical Program-at-a-Glance Day 1 CLRA-ARC 2018, Miramichi, NB

<b>14:45</b>	<b>Afternoon Break</b>	
<b>Session 6 - Mining Student Presentations (MS)</b>		<b>Session 7 - Big Data and Policy (BD)</b>
15:15	Leblanc - Mercury and Arsenic Bioaccumulation and Biotransport in Aquatic Invertebrates at Contaminated Historical Gold Mine Sites	Chester - The Value of Utilizing Big Data and Historical Information while Conducting Phase I Environmental Site Assessments (ESAs)
15:45	Chapman - Evaluating Risks of Historical Gold Mining Waste on Wetland Ecosystems and Potential Remediation Strategies	Ward - The Use of GIS in Applying Collaborative Evidence-Based Policies Related to Flood Vulnerability
16:15	Stack - Challenges in Reconstructing Soils: Building the Foundation for Forest Restoration in Mine Reclamation Sites	Demerchant - NB Wetland Policy, Wetland Ecosystem Services Protocol (WESP), GeoNB for Wetland Mapping
<b>18:00</b>	<b>Evening Activities</b>	

## Technical Program-at-a-Glance Day 2 CLRA-ARC 2018, Miramichi, NB

<b>Time</b>	<b>Wednesday, October 17</b>	
<b>Session 8 - Climate Change (CC)</b>		<b>Session 9 - Mining Perspectives (MP)</b>
8:30	Ells - A 2018 (10 Year) Follow Up and Review of the PIEVE 2008 Coastal Public Infrastructure Vulnerability Evaluation Case Study in Placentia, NL	Beckett - Sudbury, Ontario, Canada – Lessons Learned from 40 Years of a Community-based Regreening Programme on a Smelter-Impacted Landscape
9:00	Bowron et al - Making Room for Wetlands: Application of Coastal Habitat Restoration for Climate Change Adaptation in Atlantic Canada	Spiers - Ecosystem Reclamation in Smelter-Impacted Landscapes in Northern Russia: A Tourist's Perspective
9:30	MacEachern - Water Treatment in a Changing Climate World	Guittonny - Root Colonization in Mine Covers and Impact on their Functioning

## Technical Program-at-a-Glance Day 2 CLRA-ARC 2018, Miramichi, NB

<b>10:00</b>	<b>Morning Break</b>	
<b>Session 10 - Interventions (IN)</b>		<b>Session 11 - Mine Wastes (MW)</b>
10:30	Pauley - Petitcodiac Causeway Project	Coleman - In Situ Neutralization of Acid-Generating Waste Rock at the Fire Road Mine, Minto, NB
11:00	Marcotte - Remediation and Restoration of the Lac Megantic, Quebec, Oil-Train Disaster	McDougall - Investigation of Potential Spot Treatments for Isolated Pockets of Acidic Mine Water at the Fire Road Mine (student presentation)
11:30	Pett & Wilson - Avon Causeway Project	Spiers - Biogeochemical Processes at the Organic Technosol-Tailings Interface: Sudbury Examples
<b>12:00</b>	<b>Lunch &amp; AGM</b>	
<b>Session 12 - Wetland Restoration (WL)</b>		<b>Session 13 - Successful Partnerships (SP)</b>
13:15	Nash - Enhancing Headwater Wetlands in Palmer Brook	Keddy - Peatland harvesting and restoration on New Brunswick Crown Land
13:45	Butler - Brunswick Smelter Saltwater Wetland Restoration	Cormier - Brunswick Mine: From World Class Ore Body to World Class Mining Operation to World Class Closure
14:15	Graham et al. - Building on Ten Years of Experience to Design the Truro-Onslow Dyke Realignment and Tidal Wetland Restoration Project	LeBlanc et al. - More than 100 Peatland Restoration Projects in Canada: A (Brief) History of a Successful Partnership Between Academic Research and the Horticultural Peat Industry
<b>14:45</b>	<b>Afternoon Break</b>	

## Technical Program-at-a-Glance Day 2 CLRA-ARC 2018, Miramichi, NB

Session 14 - Advances in Analytical Techniques (AT)		Session 15 - Initiatives and Innovations (II)
15:15	Coleman - STAR (In Situ) and STARx (Ex Situ): Overview and Full-scale Applications of Smoldering Combustion for the Remediation of Contaminated Soils and Liquid Organic Wastes	Ferguson & Markey - Moving Forward, Together: Public Engagement and Water Licensing Approaches in Planning for Remediation of the Giant Mine Site
15:45	Chessie - New Brunswick LiDAR	Turner - CN Initiative Protects Rare Plants and Provides Nature Trail to Community
16:15	Sweet - Use of Near-Infrared Reflectance Spectroscopy for Real-Time Assessment of Contaminant Distributions and Soil Properties	Coleman - Thinking Outside the Box During Mine Reclamation to Increase Habitat Creation Opportunities
16:45	Closing Comments	
18:00	Dinner Reservations at local Pub (sign up at Registration Desk)	

### Poster Presentations

### Tuesday and Wednesday

### Room A-2232

Alfredo Carcamo	Natural Salinity Characterization of Soils in Southern Alberta
Tony Bowron	Looking Back over 15+ Years of Tidal Wetland Restoration Projects in Nova Scotia, Canada
Jennie Graham	High Resolution, Low-Altitude Aerial Photography for Habitat Restoration, Monitoring and Mapping.
Tony Bowron	Striking a Balance: Applying Ecomorphodynamic Principles to Enhance Resilience of Dykelands to Climate Change
Mélina Guêné-Nanchen et Line Rochefort	Régénération de la végétation dans les sites d'emprunt utilisés pour la restauration des bogs



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