

Poster Session (in Faculty Lounge)

Genotoxicity of MeHg in Wild Mink (*Mustela Vison*) and North American River Otter (*Lutra Canadensis*). **CHRISTIANNE LOUPELLE**, Natural Resource Sciences

Targeted P Applications Based on Grid Soil Sampling.
PETER ENRIGHT, Brace Centre for Water Resources Management

Addressing Water Scarcity and Drought in Central Asia due to Climate Change.
CATHERINE SENEAL, Brace Centre for Water Resources Management

Assessment of Water Stress on Soybean and the Impact of LCO Spray on that Stress.
SARA ATTI, Agricultural & Biosystems Engineering

Development of a Quantitative Method to Study Hysteresis Behaviour of Dissolved Ion Transport in Surface Runoff. **JACQUES LANGLOIS**, Natural Resource Sciences

Maize Residue Breakdown and N Dynamics Under Different Tillage Systems.
MAGDA BURGESS, Natural Resource Sciences

Measuring Greenhouse Gas Emissions at the Farm-Scale Using the Nocturnal Boundary Layer Budget Method. **LAURA WHITBOL**, Natural Resource Sciences

Application of Hyper-Spectral Aerial Remote Sensing for Precision Weed and Nitrogen Management in Corn Fields.
PRADEEP KUMAR GOEL, Agricultural & Biosystems Engineering

The Brace Centre for Water Resources Management is an interdisciplinary research centre of McGill University. Academic staff affiliated with the Centre are drawn from several faculties in the University. They provide expertise in the technical, social, economic, legal and environmental aspects of water management.

The work of the Centre is partially supported through a bequest to McGill University by James Henry Brace. He stipulated that the bequest be used "to provide for and carry on research for the development of methods for reducing the salt content of sea water so that it may be used economically and effectively for irrigation; and for research into methods of irrigation or other means to make desert or arid land available and economically useful for agricultural purposes".

The Centre applies to external agencies for grants and contracts to support its research and teaching activities.



Centre for Water Resources Management

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Second Annual
GRADUATE STUDENT
COLLOQUIUM

Thursday, March 20, 2003

Raymond Building, Room R2-046
Macdonald Campus of McGill University
Ste-Anne-de-Bellevue, Qc

Photo: Peter Enright



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Schedule

09:00 Opening Remarks
Dean Deborah Buszard

09:20 Regional Estimation of Floods for Ungaged Medium-Sized Basins in Quebec
Nelly Peyron, Civil Engineering & Applied Mechanics

09:40 Tertiary Treatment of Municipal Wastewater Using Floodplain Filtration Technique
Sobhalatha P. Kunjikutty, Agricultural & Biosystems Engineering

10:00 Effectiveness of Polyacrylamide for Short-Term Erosion Control on Steep Slopes
Mark Partington, Natural Resource Sciences

10:20 **Break**

10:40 Managing Our Water Resources: The Case for Demand Management
Walid Khawam, Civil Engineering & Applied Mechanics

11:00 Modeling Phosphorus Dynamics in Tile Drained Fields
Joumana Abou Nohra, Agricultural & Biosystems Engineering

11:20 A New Method for Defining Regional Homogeneity and its Application to Extreme Rainfall Estimation for Ungaged Sites
Tan Danh Nguyen, Civil Engineering & Applied Mechanics

11:40 Sustainable Water Management in Mexico City
Jamie Carrera, Civil Engineering & Applied Mechanics

12:00 **Lunch (Faculty Lounge)**

13:00 Effects of an Entomophilic Parasite on an Aquatic Insect Community: An Exercise in Reality Science
Emily Wallace, Natural Resource Sciences

13:20 Development of User Interface in GIS for Watershed Management
Dr. Arjamadutta Sarangi, Agricultural & Biosystems Engineering

13:40 Toward a Theoretical Basis for Ecosystem Engineering
Tania Lanphere, Agricultural & Biosystems Engineering

14:00 Red-Breasted Merganser (*Mergus Serrator*) Brood Movements, Habitat Use and Survival Rates in Eastern New Brunswick
Shawn Craik, Natural Resource Sciences

14:20 Entomological Assessment of Malaria Mosquitoes in Two Regions of Southern Sri Lanka: Is Risk of Contracting Malaria Related to Mosquito Breeding?
Angela Goodfellow, Natural Resource Sciences

14:40 **Break**

15:00 A Field Filter to Effectively Manage Agricultural Wastewater
Sophie Morin, Agricultural & Biosystems Engineering

15:20 Combining Crop Growth Model with Remote Sensing
Yousef Karimi, Agricultural & Biosystems Engineering

15:40 Nighttime Measurement of Greenhouse Gases over Agricultural Fields
Nathalie Mathieu, Natural Resource Sciences

16:00 Nitrogen and Phosphorus Leaching as Influenced by Tillage, Crops and Fertilizer Sources
You Jiao, Natural Resource Sciences

16:20 The effect of *Bradyrhizobium Japonicum* and Methyl Jasmonate (Meja) on Soybean (*Glycine Max*) Nodulation, Nitrogen Fixation and Grain Yield Under Short Season Conditions
Fazli Mabood, Plant Science

16:40 Presentation of Undergraduate Essay Award & Closing Remarks
Dr. Vijaya Raghavan, James McGill Professor and Chair, Agricultural & Biosystems Engineering

For further information, please contact:

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Abstracts can be viewed at: www.mcgill.ca/brace/publications/reports