

### **PhD Theses**

- 1993 Bourque, Charles, PhD, Sulfur dioxide absorption by spruce forests downwind from a coal-fired generator
- 1994 Meng, Fan-Rui, PhD, Sulfur dioxide effects on net photosynthesis and cumulative CO<sub>2</sub> fixation in red spruce stands
- 1996 Roy, Roger James, PhD, Towards an ecological georeferenced framework for forest management planning
- 2000 Moayeri, Mohammad Hadi, PhD, Mass balance related sustainability of forest biomass production: Concepts and applications
- 2001 Zhu, Xinbiao, PhD, The role of xylem cavitation and shoot and root freezing injuries in yellow birch decline: Experiments and model
- 2001 Zhu, Zhanxue, PhD, Simulating monthly soil leaching rates using a forest biomass and nutrient cycling model
- 2015 Nasr, Mina, PhD, Geospatial analysis of total mercury concentrations in stream and lake sediments across Canada
- 2018 Furze, Shane Robert, PhD, A high-resolution digital soil mapping framework for New Brunswick, Canada
- 2019 Jones, Marie-France, PhD, Mapping soil trafficability by way of temporal hydrology modeling and spatial wet-areas-mapping

### **MEM Reports**

- 2025 Amankwa-Gyimah, Righteous, MEM, Estimating mean annual discharge at road and border stream intersection using Ghana as a case study

### **MF Reports**

- 2018 Li, Yanyi, MF, Site-specific water quality analysis of sediments and surface waters in Fredericton
- 2020 Chen, Wei, MF, Assessing pesticide loading and concentration with assistance of integrated hydrological models in streams of small to medium- sized watersheds

### **MFE Reports**

- 2006 Meng, Xiangfei, MFE, Design of GIS based forest road layout and environmental assessment tool

### **MSc Theses**

- 1984 Meyer, Wietse Lense, MSc, Organo-metal-phosphate complexation

### **MScEM Theses**

- 2024 Green, Hannah, MScEM, Assessing the landscape drivers of cold-water temperatures at tributary confluence plumes: A multi-spatial analysis

## MScF Theses

- 1985 McGrath, Timothy Peter, MScF, Forest biomass accumulations: A parametric approach
- 1985 Ouimet, Rock, MScF, Effects of aluminum speciation on nutrient and aluminum uptake of Black spruce in sand-culture experiments
- 1989 Mellerowicz, Kajetan Tadeusz, MScF, Elemental contents (Al, Fe, Ca, Mg, K, Mn, P) and field response of two New Brunswick forest soils and of black spruce to simulated acid precipitation
- 1995 Jewett, Kevin, MScF, Hydrogeochemical observations and simulations for pre- and post-harvest conditions at the Nashwaak experimental watershed project
- 1995 Keys, Kevin S., MScF, An ion exchange resin disc method for estimating percolation ion fluxes in forest soils
- 1995 Yanni, Shelagh, MScF, Hydrogeochemical assessment of water in forested watersheds at Kejimikujik National park: Discharge rates, chemical composition, and ion fluxes
- 1998 Zhu, Zhanxue, MScF, Modeling the effects of harvesting on nutrient cycling and long-term site sustainable productivity
- 2000 Case, Bradley S., MScF, Interpreting the spatial distribution of select soil properties in two New Brunswick upland watersheds by way of the flow accumulation concept
- 2000 Simpson, Brian N., MScF, Water quality effects of forest operations on fourth, fifth, and sixth order streams
- 2002 Balland, Vincent, MScF, Hydrogeologic modeling of the flow of cations and anions in select watersheds of Eastern Canada with special focus on snowpack effects
- 2002 Pomeroy, Joseph H., MScF, Stream turbidity signatures within the Hayward Brook watershed study
- 2002 Stanley, Brenton William, MScF, The Hayward Brook Watershed Study: hydrogeochemistry and responses to forest operations
- 2003 Allen, Darren John, MScF, Spring dieback of yellow birch in North America: Historical examination of weather and frost hardiness
- 2003 Fowler, F. Craig, MScF, Modelling watershed responses to agriculture and forestry in the potato belt of North-Western New Brunswick
- 2004 Otorowski, Catherine Irene, MScF, Mercury in gulls of the Bay of Fundy
- 2004 Steeves, Matthew T., MScF, Pre- and post-harvest groundwater temperatures, and levels, in upland forest catchments in Northern New Brunswick
- 2005 Zhang, Chengfu, MScF, Modelling of forest litter decomposition and nitrogen mineralization
- 2007 Nasr, Mina, MScF, Mercury levels in fungal fruiting bodies from interior and coastal forests of the Bay of Fundy region, New Brunswick, Canada
- 2007 Sweeney, Laura, MScF, Mercury cycling through finfish aquaculture within the lower Bay of Fundy: possibilities for control in support of the health of coastal communities
- 2008 Chi, Xinyan, MScF, Hydrogeological assessment of stream water in forested watersheds: Temperature, dissolved oxygen, pH, and electrical conductivity
- 2008 Glode, Jason, MScF, Analyzing and modeling windthrow along riparian zones in Newfoundland
- 2011 Noseworthy, Joshua, MScF, A mass balance, biogeochemical framework for assessing forest biomass harvest sustainability
- 2012 Campbell, David Matthew Howley, MScF, TRAIL: Optimizing trail locations by terrain conditions and other considerations, at high resolution
- 2012 Jutras, Marie-France, MScF, Modeling stream discharge in forest catchments across Canada: Hydraulic conductivity calibrations
- 2012 Moore, Jeanne, MScF, Refining detail of forest ecosite classification for the Fundy model forest in New Brunswick
- 2014 Chisholm, H. Kyle, MScF, Modeling and mapping shallow water properties
- 2014 Hiltz, Douglas, MScF, Predictive vegetation type mapping using cartographic depth-to-water, slope, aspect, and elevation

- 2014 Smith, Amanda C., MScF, Wood decomposition and nitrogen mineralization modelling across North and Central America
- 2016 Goguen, Monique, MScF, Modeling and mapping distributions of common bryophytes across New Brunswick using a lidar-derived depth-to-water index
- 2017 Ogilvie, Jae J., MScF, Flow-line and wet-areas conformance testing of wetland locations using LiDAR and SRTM elevation data
- 2022 Lemieux, Kamille E., MScF, LiDAR-based potato crop suitability mapping along the upper Saint John River valley in New Brunswick
- 2023 Owusu Afriyie, Nana Agyei, MScF, GIS based modelling for forest road alignments, culvert placements and logging trail delineation

### **MScFE Theses**

- 2008 Labelle, Eric R., MScFE, Assessing soil disturbances caused by forest machinery

### **BScF Theses**

- 1980 Hawkes, Michael Raymond, BScF, Some factors which relate snowmelt and evapotranspiration to diurnal streamflow fluctuations in the Lake Brook basin of the Nashwaak experimental watershed project
- 1981 Archibald, Roxanne Marie, BScF, The effects of fertilization on containerized black spruce seedlings at a forest tree nursery
- 1981 Buggie, William J., BScF, Peat harvesting in New Brunswick: An engineering proposal for on site water treatment
- 1981 Lavigne, Daniel Roma, BScF, Planning by goal programming: A case study for multiple-use of forested lands
- 1981 Rainer, Elizabeth A., BScF, Forest roads: Backslope erosion control
- 1981 Robertson, Robin G., BScF, Predicting deer track depths in snow from snow survey station and climatological station data
- 1981 Udit, Balkaran, BScF, Rates of forest litter decomposition and mineralization as affected by clearcutting
- 1982 Ramnarine, Seepersad, BScF, Modelling and verifying the effects of acid precipitation on forest soil leachates: A simple approach
- 1982 Scruton, John A., BScF, Volunteer Balsam fir growth on abandoned fields for Christmas tree production: Factor analysis of tree, soil, and site characteristics
- 1983 Brewer, Jon Allison, BScF, Effects of Aluminum, acidity, and organic acid on germination and early growth of black spruce seedlings (*Picea mariana* [Mill.] B.S.P.)
- 1983 Frame, Donald Craig, BScF, A general approach to forest biomass analysis by way of computer simulation
- 1983 Kowlessar, Vishnu, BScF, The soil-root interface in forest soils: Production of organic acids
- 1983 Saunders, Kimberly, BScF, Verification of the effects of acid precipitation on lake systems
- 1984 Allen, Peggy, BScF, Container design effects on Black spruce seedling growth before and after outplanting
- 1984 Fulton, Randolph T., BScF, Effects of acidity, aluminum and oxalic acid on the growth and early development of Black spruce seedlings (*Picea mariana* [Mill.] B.S.P.)
- 1984 Moerman, Dennis Eric, BScF, A multivariate site analysis of spruce/fir stands in northwestern New Brunswick
- 1985 Ellis, Tim, BScF, The effects of aluminum, calcium and pH on the early growth and development of Yellow birch seedlings (*Betula alleghaniensis* Britton.)

- 1985 Manasc, Justin, BScF, Tree-ring analysis of Red spruce (*Picea rubens* Sarg.) in forest stands downwind from the Grand Lake thermal generating station in New Brunswick: Possible impacts of Air (SO<sub>2</sub>) pollution
- 1985 Taviss, Ian H., BScF, The forest floor: A study concerning forest litter acidification
- 1985 Wort, Andrew D., BScF, Timber harvest scheduling: A case for hierarchical decision making via goal programming
- 1986 Wightman, R. A., BScF, Computer simulations for biomass and nutrients allocations in selected forest stands
- 1987 Scott, Michael C., BScF, Elemental uptake (Al, P, Ca, Mg, K) by Black spruce seedlings from nutrient solutions/ peat/ sand cultures: Effects of water-soluble inorganic and organic aluminum in the rooting medium
- 1987 Strucel, Irene, BScF, Water uptake by black spruce seedlings from nutrient solutions/peat/sand cultures: Effects of water-soluble inorganic and organic aluminum in the rooting medium
- 1987 Sugg, Allan Edward, BScF, Sulfate adsorption and desorption in a humo-ferric podzol: The results of applying simulated acid precipitation to soil lysimeters
- 1988 Harris, Darrell, BScF, Optimizing the seeding operation for forest seedling production
- 1989 Deal, John Arnold, BScF, Foliar leaching and needle surface of Black spruce seedlings growing on two acid-treated soils with contrasting sulfate absorption
- 1990 Kavanagh, Joe Carl, BScF, Soil and plant responses to acid nitrate applications: A greenhouse experiment with podsolized soil and black spruce seedlings
- 1992 O'Brien, Elizabeth M., BScF, Assessing effects of climate and soil variables on radial growth of *Picea rubens* in the Lake Brook Basin
- 1992 Rogers, Steven Lee, BScF, Radial growth variations for red spruce in relation to soil moisture and temperature at the Acadia Forest experiment station and the University of New Brunswick woodlot
- 1992 Yanni, Shelagh, BScF, Tree ring analysis of red spruce (*Picea rubens*), in relation to climate at Kejimikujik National Park, Nova Scotia
- 1993 Crawford, William, BScF, Fertilization of red spruce (*Picea rubens*, Sarg) with ammonium nitrate: Analysis of the rings
- 1994 Hetherington, Derek Forbes, BScF, Soil conditions at select upland forest sites in provincial parks and conservation areas in Southern Ontario
- 1994 Isaac, Cornelius, BScF, Mechanisms and factors influencing the movement of water through soils
- 1995 Robichaud, Dana A., BScF, Water quality of forest sites at an upland-wetland transition zone in New Brunswick
- 1996 Case, Bradley S., BScF, The influence of water flow and accumulation on spatial distributions of soil properties in two New Brunswick upland watersheds
- 1996 Crawford, James R., BScF, The intrinsic and transient properties of planted *Pinus banksiana* (Lamb.) and *Picea mariana* (Mill. B.S.P.) on upland soils within the Fundy Model Forest
- 1996 Perry, Paul, BScF, Investigating into the presence of cadmium and mercury in the waterways of Southern New Brunswick and its presence on the surrounding biota
- 1996 Somerville, John, BScF, Forest operations in buffer zones effects on nutrient exports from basins
- 1997 Christie, Nathan A., BScF, Soil and biomass nutrient levels along a topographic gradient within a black spruce plantation in the Fundy model forest
- 1997 Easthouse, Kari, BScF, Pet calibration and testing of the forest hydrology model ForHyM for Saskatchewan
- 1997 Kenny, Kevin J., BScF, The comparison of environmental impacts caused by conventional logging verses cable logging on steep slopes
- 1997 Mitchell, Bradley, BScF, A comparison between growth on four year old Jack pine and Black spruce plantations established on imperfectly drained stony brook soils in the Fundy model forest
- 1997 Rossiter, M. Andre, BScF, Chemical properties of soils sampled for the forest biomass growth project (The Fundy model forest)

- 1997 Saulnier, Blair T., BScF, The response of red spruce (*Picea rubens* Sarg.) to urea fertilizer in Nova Scotia: A 10 year study
- 1997 Simpson, Brian N., BScF, Quantifying sustainability for twenty-five forest sites in New Brunswick
- 1998 Delorey, Steven J., BScF, 1998 Algal bloom investigation
- 1998 Moffatt, Gregory R., BScF, Watershed analysis with a geographic information system
- 1999 Betts, Matthew, BScF, A landscape approach to conserving the Appalachian hardwood forest
- 1999 Sullivan, John J., BScF, The effects of height growth of black spruce (*Picea mariana* [Mill.] B.S.P.) and Jack pine (*Pinus banksiana* Lamb.) in relation to soil bulk density
- 1999 Williams, Dana P., BScF, Analysis of Spatial and temporal variation in soil moisture during the growing season on the Lunn Farm, Woodstock, New Brunswick
- 2000 Brown, Johnathon S.S., BScF, The effects of salination in the Corbett Brook watershed area
- 2000 Flemming, Connie, BScF, The effects of mycorrhizal fungi inoculation on the growth of black spruce (*Picea mariana* [Mill.] B.S.P.) seedlings
- 2000 Kelly, Nadine E., BScF, The development of a potential unique areas map and forest community guide for the Chipman Doaktown district
- 2000 Mayrand, Krista D., BScF, Predicting and quantifying groundwater locations within the Hammond river watershed to then predict water quality
- 2000 Noddin, Michelle M., BScF, Comparison of the reliability of line and mass point data in digital elevation models when estimating the number and diameter of culverts
- 2001 Lee, Joanne H., BScF, Norway spruce seedlings in Jiffy Pots: Optimizing growth with grit mixtures
- 2001 Morrison, Cheryl, BScF, Patch dynamics of the Christmas mountains following a large scale natural disturbance
- 2003 Khan, Amanda, BScF, Comparison of digitally mapped water saturated areas to New Brunswick Department of Natural Resources buffer zone guidelines for three sites in the province
- 2004 Meaney, Joe P., BScF, Partial cutting techniques within riparian buffer zones to prevent windthrow in Central Newfoundland
- 2005 Glode, Jason Chad, BScF, Selective harvesting of riparian zones in Western Newfoundland
- 2006 Anderson, Adam, BScF, Field comparison of synthetic fiber and steel cable mainlines in Western Newfoundland
- 2012 Noble, Kayla, BScF, Hydrological Risk in Costa Maya Mexico
- 2013 Goguen, Monique, BScF, Examining the relationship between Bryophyte communities and the cartographic depth to water index
- 2023 Poley, Violet, BScF, Relating Soil Organic Carbon to Depth-to-Water by statistical analysis