Some Recent Alumni

Graduate Students



Simone Sandercombe (M.Sc. Geography 2011)

Simone's master's research examined the response of vegetation to abrupt changes throughout the Holocene using a high resolution sediment core from Bay of Islands, Newfoundland. Her research included counting and identifying both pollen grains and dinoflagellate cysts within each layer of the core to gain an understanding of the ecosystem changes throughout the past 11,000 years.



Florin Pendea (Ph.D. Geography 2011)

Florin's field work was on James Bay, Quebec, linked to archaeological investigations by Dr. Andre Costopoulos (McGill Anthropology Dept.). His Ph.D. research utilized pollen, plant spores, dinoflagellate cysts, charcoal and other fossil evidence. He determined the rate of isostatic rebound in the region and how it

relates to environmental change faced by early inhabitants of southern James Bay - and what future changes may be expected. He is now a professor at Lakehead University's Orillia Campus - website: http://orillia.lakeheadu.ca/dr-florin-pendea/

Undergraduate Researchers and Research Assistants



Roselyn Kryczka (B.Sc. Work Study)

Rosie works on our studies of marsh plant production, sorting vegetation samples and analyzing roots from "ingrowth cores" that had been deployed in salt marshes. She is also assisting in literature reviews of enzymes used by plants exposed to osmotic stress and greenhouse gas emissions from tidal wetlands.



Victor Lam (B.Sc. Work Study)

Victor is primarily responsible for data entry and management, as well as organization of sample equipment in preparation for field trips. He also is assisting in the preparation of soil samples for chemical analyses and has helped process the large quantity of plant samples brought back to the lab in the fall.



Anne Schreck (B.Sc. Work Study)

When not on stage, Annie is analyzing the chemistry of salt marsh soil porewater samples. She also contributes to our research on plant production and grazing.

Reilly Macdonald

(B.Sc. Honour 2012s, McGill School of Environment)

Reilly's thesis research examined July greenhouse gas flux in two New Brunswick salt marshes: Dipper Harbour and Kouchibouguac National Park.



Robby Marrotte (B.Sc. Geography Honours 2011 NSERC Undergraduate Research Fellow)

Robby's Honours thesis examined the utility of water lilies and spatterdocks as an alternative to pollen for paleoecological research. His work won an award from the Palynological Society and has been published in the journal *Review of Palaeobotany and Palynology*. He also worked on palynology of Everglades tree islands and the middens beneath them. Robby started off as a work study student and contributed to other lab and field research projects. He is now an M.Sc. student in the Biology Department at McGill.

Diane Charbonneau

(B.Sc. 2009 UQAM, NSERC Undergraduate Research Fellow)

Diane examined the importance of salt marshes to threatened species in the US and Canada. She presented her research at a meeting of the NorthEast Estuarine Research Society and the McGill Biodiversity Conference.



Angela Grant (B.Sc. 2011, Work Study & Independent Studies)

Angela researched the potential use of volunteer geographic information (VGI) and geospatial web mapping applications (Geoweb) by non-governmental organizations (NGOs) for environmental management in Atlantic Canada. She also helped organize field trips and collect field data. Angela is now a M.Sc. student in McGill's Faculty of Agricultural and Environmental Sciences



Zahra Hudda (B.Sc. Work Study)

Zahra helped complete protocols for preparation of small samples for nutrient analysis and just about all the other tasks around the lab: preparation of samples for pollen and dinoflagellate cyst analysis,

preparation of plant samples, lab organization and maintenance.



Zakir Jafry (B.Sc. Work Study)

Zakir was employed during summer 2008 through work study. He is applying his GIS background to contribute to research projects on the coastal squeeze (salt marsh sustainability with rising sea level) and

impact of greenhouse warming on marine fisheries.



Jan Kowalewski (B.Sc. Work Study)

Jan was a field research assistant and field photographer. Back at McGill Jan researched sediment accumulation rates and carbon budgets in mangrove ecosystems. Presently, he is completing his

B.Sc. in Earth System Science.



Ellen Leask (B.Sc. Work Study)

Ellen assisted in research on plant productivity in marshes and agricultural lands and most other projects in the lab and field.



Yumeng (Marina) Li (B.Sc. 2011, Work Study NSERC Undergraduate Research Fellow)

Marina participated in field research on the Bay of Fundy and Gulf of St. Lawrence where she collected and analyzed samples for soil water chemistry and vegetation production. Back at McGill she was responsible for documenting a protocol for use of our Wiley Mill (to grind

plant samples for nutrient analysis), and nearly all phases of the lab's salt marsh research – which means lots of mud, dead plants and cooking samples for pollen concentration. She and Lorna were running the lab most of the summer of 2008! Marina is now in medical school.

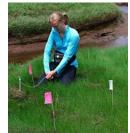




Lorna Murison NSERC Undergraduate Research Fellow

Lorna graduated with a degree in Geography from Bishops University in 2008. That summer she held an NSERC Undergraduate Research Fellowship from Bishops and was co-supervised with Prof. Elisabeth Levac (Bishops). Lorna participated in field research on the St. Lawrence River

Estuary, the Bay of Fundy, and the Gulf of St. Lawrence where she collected and analyzed samples for soil water chemistry and vegetation production. Back at McGill she contributed to a number of research projects – for instance applying her GIS skills to help Zakir in the coastal squeeze project. In the wet lab she had the primary responsibility for preparation of ocean sediment samples used in Dr. Levac's paleoclimate research – and pretty much co-managed the Chmura lab with Marina during summer 2008!



Katie O'Sullivan (B.Sc. Work Study)

Katie, employed through work study, sampled soil and vegetation on field trips to salt marshes on the Bay of Fundy and Gulf of St. Lawrence. In the photo she is measuring the redox potential of



the soil. During summer of 2008 she helped gear up (and down) for field trips and analyzed plant samples.

Nadine Shatilla

(B.Sc. 2011, Independent Study)

Nadine helped to sort roots washed from salt marsh ingrowth cores. She then used that and previously collected data to examine the relationship between mass and volume of soil organic matter - which is key to our understanding of the role of organic production to salt marsh accretion and sustainability with respect to sea level rise. She presented her results at the joint meeting of the NorthEast Estuarine Research Society and the Atlantic Canada Coastal and Estuarine Science Society. Nadine is now an M.Sc. student at McMaster University.



Fizzah Syed (B.Sc. Work Study)

Fizzah developed and documented a protocol for sterilization of plant and soil samples the lab imports from other countries. She assisted in most other lab work: processing of samples for pollen and dinoflagellate cyst analyses (as in this photo), and the basic grind (of plants, that is).



Lorig Taslakian (B.Sc. 2012 Work Study)

Lorig performed many different tasks during her multiple years at the lab: sorting plants samples and root ingrowth cores for productivity studies, making microscopic charcoal counts from James Bay sediment samples, and preparing materials for field research. In 2011 she became responsible for training new research assistants and general lab management.