

Project team Biographies

Wetland and Rare Species Assessment

Ian Bryson, M.Sc., EP (CBCL Limited)

Mr. Bryson is a certified Environmental Professional (EP) with 14 years of industry experience in ecology, forestry and environmental consulting. He holds both Masters and Bachelor degrees in Biology, and a Diploma in Engineering from St Francis Xavier University (Antigonish, NS), as well as an Advanced Diploma in Geographic Information Systems (GIS) from the Centre of Geographic Sciences (Lawrencetown, NS).

Mr. Bryson provides expertise in terrestrial ecology, habitat classification, plant inventory, GIS, wetland science, species at risk, environmental assessment, and regulatory permitting. There is a strong integration of GIS into nearly every facet of his environmental specialties. Since joining CBCL in 2007, he has worked throughout Atlantic Canada for a variety of government and private sector clients, both as a project manager, and in a lead technical role. He has been instrumental in the design and execution of many field programs, suitability investigations, large environmental assessments, forest management plans, wetland assessments and delineations, and environmental monitoring plans. His skills in the field of spatial analysis and GIS are often employed in developing multi-criteria suitability analyses, constraints mapping, modelling of natural environments, 3D visualizations, and spatial database designs. Mr. Bryson is one of the most experienced wetland professionals in the Atlantic Provinces, having conducted over 300 wetland delineations in the past five years.

Chris Kennedy, M.Sc., B.Sc., Environmental Scientist / Ecologist (CBCL limited)

Chris Kennedy is an Ecologist with CBCL Limited in Halifax, Nova Scotia and has contributed to the Marine Water Quality Program since starting with CBCL in 2011. Chris specializes in avian and terrestrial ecology, as well as wetland delineation and functional assessment. Since joining CBCL Chris has been involved in the design and execution a variety of field programs ranging from remote rare plant surveys and wetland delineations to comprehensive, full-year avian assessments.

Chris holds a Bachelor's degree in Biology from Mount Allison University (Sackville, NB), as well as a Master's degree in Biogeography from Memorial University (St. John's, NL). His career to date has included appointments at Memorial University, as well as a number of contracts with the Nova Scotia Nature Trust (NSNT), where he has contributed to the stewardship of NSNT protected lands.

Avian Assessment

SHAWN DUNCAN, B.Sc. (Bio) (Strum Consulting)

Mr. Duncan is the Vice-President at Strum, based in Bedford, Nova Scotia. Shawn has also worked as a biologist for both provincial and federal governments, as well as having senior environmental experience in the private sector for the oil and gas industry.

Shawn has worked professionally in the environmental field throughout Canada and internationally for 26 years. His areas of specialization include project planning and management, environmental impact assessment, infrastructure planning and construction, natural resource studies, public consultation, and regulatory support. Mr. Duncan has been involved in dozens of Environmental Assessments (EAs), both federally and provincially. He has worked on a number of linear projects, providing environmental planning, EA support, environmental surveys, environmental permitting, and construction oversight. He has extensive knowledge of both federal and provincial environmental legislation and has been involved in acquiring environmental approvals and permits for a number of large infrastructure projects in Atlantic Canada, including:

- FORCE Environmental Assessment
- Maritimes & Northeast Pipeline EA (Mainline and Laterals)
- Sydney Tar Ponds Clean-up
- Keltic Petrochemical and LNG Facility
- Over 20 Wind Energy Projects
- Various Quarry Projects

SCOTT DICKEY, BSc. (Hons), MREM (Strum Consulting)

Scott Dickey is an Environmental Scientist with Strum with over 5 years of professional experience. Scott has been active as a researcher and project manager with Strum's Environmental Science Group for 4 years. Scott has experience in a variety of ecological assessments including avifauna studies, botanical inventories, fish and wildlife assessments and wetland assessments. In addition field work, Scott is active in research, data analysis and reporting in support of the preparation of environmental assessments, permitting applications, component reports and other projects.

HEATHER MOSHER, BSc. (Hons), MSc. (Strum Consulting)

Heather Mosher is an Environmental Scientist with Strum working in our Environmental Science Group. She has over 4 years of professional experience working in many aspects of technical projects and environmental assessments, including field surveys, interpretation of analytical results and data, conducting background research, reporting and regulatory permitting.

Heather is an experienced field biologist and has assisted in multiple wildlife and flora surveys, including multiple avifauna surveys such as habitat studies, passerine surveys and species at risk surveys. Heather has experience conducting ecological research which encompassed background review, extensive field programs and the in depth statistical analysis of data sets

Andy Walter, BSc. (Strum Consulting)

Mr. Walter has over 8 years of experience implementing and managing projects to satisfy environmental regulatory and permitting requirements in Nova Scotia and works closely with all necessary regulatory agencies. He executes biophysical studies to support provincial and federal environmental assessments for large scale development projects, as well as to support provincial permitting for commercial developments. Mr.

Walter has extensive experience in completion and management of biophysical studies including avian, flora, fauna, wetlands, watercourses and species at risk evaluations. Mr. Walter develops project specific goals to meet client and regulatory requirements, and maintains responsibility for all aspects of project deliverables (budget, timeline, client relations, regulatory negotiations).

CHRIS PEPPER

Chris Pepper has been an active member of the Nova Scotia birding community for over a decade, and has participated in interpretative, research and data collection projects with the Nova Scotia Bird Society, Bird Studies Canada, the Young Naturalist Society and the Maritime Breeding Bird Atlas Project. He is currently a director with the Executive Committee of the Nova Scotia Bird Society and acts as the Provincial Coordinator for the Nova Scotia Spring Migration Count.

Chris has been involved with Strum's avifauna programs for the past 4 years. He has been active in conducting avifauna inventories and interaction studies for a variety of projects, including wind power facilities, powerline infrastructure, quarry developments and real-estate developments.

Dr. Phil Taylor, Ph.D

***Professor, Acadia Department of Biology
Chair, Bird Studies Canada
Executive Director, Resilience Alliance***

Dr. Phil Taylor is a professor of Biology at Acadia University in Wolfville, Nova Scotia. He obtained his PhD in 1993 from Carleton University, and did a Post-doctoral Fellowship at the University of Alberta in 1994. He studies animal movement, with a particular focus on migratory birds.

Dr. Taylor has over 30 years of experience working with migratory birds in various capacities. Of particular relevance to the present study, he has been a pioneer in the development and implementation of open-source software for the digitizing and analysis of radar data acquired from small marine radars. He has used these tools to assess patterns of movement of birds for various scientific studies and for the purpose of analyzing and tracking movements of birds in association with proposed industrial developments such as wind farms.

Jacob Walker, M.Sc.

Jacob Walker is a recent MSc graduate from Trent University in Peterborough, Ontario. In his thesis work he studied the concordance between automated acoustic sampling of American Woodcock calls and data obtained from roadside surveys done by human observers. Mr. Walker is a keen naturalist with over 15 years of experience studying birds in the field. During that time he has developed a solid understanding of bird biology and migration.

Marine Underwater Benthic Habitat Survey

Carrie Bentley, M.Sc., B.Sc.H, Senior Environmental Scientist (CBCL Limited)

Carrie Bentley has over 11 years of experience as a fisheries and wildlife biologist. Carrie specializes in fisheries and wildlife biology, environmental assessments, regulatory approvals and aquatic toxicology.

Carrie is very knowledgeable of provincial and federal legislation and associated regulatory permitting. Her experience involves project management; collecting baseline data; conducting, coordinating and leading ecological field studies; analyzing data; evaluating impacts; writing reports (e.g. Environment Assessments); completing regulatory applications and government liaison. Carrie has extensive experience conducting fish and fish habitat assessments and preparing the necessary regulatory reports and applications for submission to provincial and federal regulators. She works closely with regulators and clients during the permitting process. Carrie has worked for clients such as Marine Atlantic, DCC, Public Works and Government Services Canada, Nova Scotia TIR, EMERA, Environment Canada, BP, Imperial Oil, EnCana, Devon, mining companies, and municipalities.

Her field experience includes fish and fish habitat assessments and habitat mapping, fish sampling (electro-fishing, gill/fyke netting, minnow trapping), radio-telemetry, identifying sensitive wildlife features and wildlife habitat use, bird surveys (e.g., breeding point count surveys, playback for species at risk and owls, migratory surveys and winter surveys), amphibian playback surveys, winter snow tracking, small mammal trapping and releasing, ungulate surveys, wetland delineation/classification and vegetation identification. She has had project experience in and/or based out of eight provinces and all three territories (NS, NB, PEI, ONT, AB, BC, SK, NFL, NT, YK, and NU).

Archaeological Screening and Reconnaissance and MEKS

DARRYL KELMAN, B.A., MLitt (Kelman Heritage Consulting)

Darryl combines his education in history with over twelve years of professional experience in archaeology. He graduated from the University of Waterloo with a Bachelors degree in History in 1999, and completed a Masters in History at the University of St. Andrews in 2000, with a focus on heritage resource management. Darryl has been working as a professional archaeologist in Nova Scotia for over 10 years. Since July of 2012, Darryl has served as President and Principal Archaeologist of Kelman Heritage Consulting.

Darryl has extensive experience in the project management of archaeological assessments. He has served as both permit holder and principal investigator, in all aspects of cultural resource management, including archaeological screenings, reconnaissance, testing, monitoring, and excavations, covering a range of cultures, locations and time periods. He has also authored/co-authored over 100 technical reports over the years.

Jason Googoo

Manager



EDUCATION

1999-2001 Centre of Geographic Sciences (C.O.G.S) – Computer Technician/Analyst Diploma
1998 University College of Cape Breton (UCCB) – BA Degree in Sociology

PROJECTS

All MGS Mi'kmaq Ecological Knowledge Studies (MEKS) projects - Project Manager.

Jamaica Cadastral Conversion Project. The conversion of land parcels using IKONOS satellite imagery as the ground control. Involved in implementing QC procedures.

Involved in the implementation of the Membertou community plan.

Flood Model Project. Simulated a flood based on Truro, NS. Created several routines which modified and displayed aerial photographs as a flood progressed.

SKILLS

Computer Assisted Drafting (AutoCAD)

ArcView, ArcMap

Various scripting and programming (VB/VBA, Perl, C/C++, java/javascript)

EXPERIENCE

2002 to Present

Manager – Membertou Geomatics Consultants

- Responsible for supervision and job performance evaluations for staff.
- Project Manager for MEKS, member of MEKS project team.
- Assist a team of GIS specialists and provide GIS data to various projects.
- Provide consulting services including needs analysis and gap analysis to assist clients in meeting their GIS requirements
- Assist Membertou First Nation to meet their community planning goals and objectives

2002 – 2003

Eastcan Geomatics Limited – Involved in a training program

- Trained in data capturing, data converting.
- Data converting includes AutoCAD training and softcopy photogrammetry.
- Involved with quality assurance/quality control aspects.

Craig Hodder

GIS Technologist

EDUCATION

2000-2002 B.A., Economics, Carleton University, Ottawa, Ontario
1997-2000 Sydney Academy High School, Sydney, NS – Graduated with distinction in the International Baccalaureate Program

PROJECTS

All MGS Mi'kmaq Ecological Knowledge Studies (MEKS) Projects – GIS Database development/analysis and Author.

Jamaica Cadastral Conversion Project. The conversion of land parcels using IKONOS satellite imagery as the ground control. Involved in implementing QC procedures.

Involved in the implementation of the Membertou community plan and the Wentworth/Membertou softcopy photogrammetry projects.

SKILLS

Computer Assisted Drafting (AutoCAD)
ArcView, ArcMap
DVP Softcopy photogrammetry

EXPERIENCE

2002 to Present GIS Technician - Membertou Geomatics Consultants

- Assist a team of GIS specialists and provide GIS data to various projects.
- GIS Database development/analysis, Author and member of MEKS project team.
- Provide consulting services including needs analysis and gap analysis to assist clients in meeting their GIS requirements
- Assist Membertou First Nation to meet their community planning goals and objectives

2002 – 2003 Eastcan Geomatics Limited – Involved in a training program

- Trained in data capturing, data converting.
- Data converting includes AutoCAD training and softcopy photogrammetry.
- Involved with quality assurance/quality control aspects.

Dave Moore

Planner \ GIS Technologist

EDUCATION

- 1982 Holland College - Construction Technology
- 2000 Nova Scotia College of Art and Design (NSCAD) - Bachelor of Design (Honours),
Environmental Planning, Minor Degree in Digital Media
- 2007 Queen's University - Master of Urban and Regional Planning

PROJECTS

All MGS Mi'kmaq Ecological Knowledge Studies (MEKS) projects - Research.

Membertou Connector Road, Business Case and Routing Study (CBCL)

Habitat Threats – Sedimentation – Bras d'Or Lakes Watershed (UINR)

Physical, infrastructure and policy design and Community Planning for Membertou First Nation

On-site project management, multi-residential condominiums, Chandler's Cove, Chester, N.S.

Numerous design and research projects with both public and private engineering and architectural organizations

SKILLS

Remote Sensing (PCI Geomatics)	AutoCad (Autodesk)	SSPS Statistics
Civil Design (Autodesk)	3D Studio Max (Autodesk)	IDRISI Raster GIS
ArcView and ArcMap (ESRI)	MapInfo	MS Office

EXPERIENCE

- 2003 to Present Planner\GIS Technician - Membertou Geomatics Consultants
- 1999- 2001 CAD Technician\Planner, W.M. Fares & Associates, Halifax, N.S.
- 1985- 1995 Survey Supervisor\Cartographic Assistant, Public Works and Government Services Canada
- 1984- 1985 Estimator\Technician, MBB-Trecan, Halifax, N.S.
- 1983- 1984 Project Manager, Research Project, Municipality of Chester