

Resume of Barbara C. Perrott

EDUCATION

Diploma in Cartography: Digital Mapping with Honours *Lawrencetown, Nova Scotia*
Centre of Geographic Sciences, NSCC *May 2010*

Bachelor of Commerce Degree *Halifax, Nova Scotia*
Major: Finance (Co-operative Education) *May 2003*
Saint Mary's University

SOFTWARE SKILLS

GIS
ArcGIS 9.2 to ArcGIS 10 - Topographic, thematic and base mapping; geospatial data analysis and manipulation; geodatabase setup and data entry; geo-referencing; digitizing; creating DEM's and hillshades; writing labelling scripts; python programming with ArcPy site package; modeling and visualizing 3D data (LiDAR and derived DEMs).

QGIS – Digitizing features using OpenLayers and CADTools Plug-ins.

MapInfo - Data entry; thematic mapping; data manipulation; geocoding; advanced SQL queries.

GRAPHICS

CorelDraw X4/ Adobe Illustrator - Creating map layouts and custom map symbols; choosing colour schemes; text symbolization and placement on maps; importing, registration, and scaling map data.

CorelPHOTO-PAINT X4 - Photographic composition; image manipulation; enhancing hillshades.

Adobe Photoshop - Enhancing hillshades.

CAD

AutoCAD Map 3D - Precision drawing using surveyors' bearings and script files; using .lisp files to label bearings and distances; custom map symbols and bar scales; cleaning data and creating polygon topology; image rectification and geo-referencing.

Bentley Microstation V8XM – Topographic mapping using 2D and 3D seed files, cell libraries and colour tables; building TINS and rendering image of TIN; geo-referencing images using Raster Manager.

OTHER

Microsoft Office Suite

DATASETS

NSDNR Forestry Database, NSGC Data Locator (Aerial photography, 1:10,000 NSTDB), Nova Scotia Property Records Database, Nova Scotia Civic Addressing File, Canadian Soils Information System, Geogratis CanVec data, Nova Scotia Community Counts.

SURVEY & GPS EQUIPMENT

Leica Geosystems System 500 & 1200, Trimble Yuma, Garmin GPSMAP 60CSx

EXPERIENCE

GIS Project Manager

Saint Mary's University – Department of Geography

May 2009 - Present

Project | *Partnership for Canada-Caribbean Climate Change Adaptation (ParCA)*

Data assimilation, transformation and cartographic map production for community visioning and publication for all members of the ParCA team (Seychelles, Mauritius, Tobago, Jamaica, and Nova Scotia).

- Use Community Based Vulnerability Assessment interview techniques in participatory and community visioning mapping exercises.
- Create a rapid shore zone assessment tool.
- Develop a GIS geodatabase of coastal zone characteristics.
- Calculate rates of coastal erosion using digitized shorelines from decadal scale of satellite and aerial imagery.

Project | *Shore Zone Characterization - Atlantic Climate Adaptation Solutions Association*

Developed an integrative geodatabase of coastal zone characteristics as well as assessed areas of shoreline at continued risk of erosion within three Bay of Fundy study sites.

- Designed a file geodatabase using domains and subtypes to classify five distinct shore zones.
- Planned and organized fieldwork as well as supervised two students completing work.
- Conducted shoreline surveys using Trimble Yuma with geo-tag enabled camera.
- Used Quickbird and IKONOS satellite imagery to identify shore zones and classified areas of coastline not accessible by land.
- Organized publication of 22 maps in collaboration with the NS Department of Natural Resources depicting shoreline erosion, presence of shoreline armoring and location of dykes.
 - Selected and applied aesthetically appealing colour schemes.
 - Created point, line, and area symbology.
 - Worked with a professional editor to refine text placement and surround text.
- Geo-referenced and mosaicked aerial photography using ArcGIS 10.
- Designed and created maps for inclusion in academic publications and reports.
- Taught undergraduate students in GIS and Cartographic design.
- Presented research at several conferences: Coastal and Estuarine Research Federation, Atlantic Climate Change Adaptation Solutions Association, Bay of Fundy Ecosystem Partnership, and Canadian Association of Geographers.

Project | *Marshlands Atlas – Nova Scotia Department of Agriculture (NSDA)*

Created a user-friendly digital cartographic product (in ArcReader 10) and provided ongoing mapping support.

- Geo-referenced historical marsh plans and digitized vector features using ArcGIS 10.
- Updated modern and historical shapefiles with additional attribute information.
- Created a series of maps depicting historic dyke features and associated current day features such as building footprints, property boundaries, and surveyed features such as dyke center lines and aboiteaux. LiDar data, satellite imagery and aerial photography were also added.
- Trained NSDA staff in use of ArcReader 10 for day-to-day GIS needs.
- Wrote a final report summarizing the above activities including all metadata.

VOLUNTEER EXPERIENCE

- 2012 **Geomatics Association of Nova Scotia – Geomatics Atlantic Conference**
Halifax, Nova Scotia
- 1997-2009 **CanSkate Instructor**
Lawrencetown Youth Arena
- 2009 **Student Mentor and Student Council Representative**
Nova Scotia Community College – Annapolis Valley Campus

AWARDS/ACHEIVEMENTS

- Cartography Achievement Award 1st and 2nd year for highest academic standing.
- Best Thematic Map awarded by the Centre of Geographic Sciences.
- NSCC Board of Governors Award for academic achievement and community involvement.
- President's Prize 2010 – Canadian Cartographic Association.
- Saint Mary's University Entrance Scholarship.
- WHMIS and OHS Certification.

PUBLICATIONS

van Proosdij, D; Perrott, B and Carroll, K., 2013. Development and Application of a Geo-temporal Atlas for Climate Change Adaptation in Bay of Fundy Dykelands. In: Conley, D.C., Masselink, G., Russell, P.E. and O'Hare, T.J. (eds.), Proceedings 12th International Coastal Symposium (Plymouth, England), Journal of Coastal Research, Special Issue No. 65, pp. xxx-xxx, ISSN 0749-0208.

Pietersma-Perrott, B and D. van Proosdij. 2012. Shore Zone Characterization for Climate Change Adaptation in the Bay of Fundy. Final report submitted to Atlantic Climate Adaptation Solutions Association, Climate Change Directorate, Nova Scotia Department of Environment. 61pp.

Pietersma-Perrott, B and D. van Proosdij. 2012. Nova Scotia Department of Agriculture – Marshlands Atlas Cumberland, Kings & Hants County. Final report submitted to Atlantic Climate Adaptation Solutions Association, Climate Change Directorate, Nova Scotia Department of Environment. 36pp.

Pietersma-Perrott, B and D. van Proosdij. Open File Map ME 2012-012, Shore Zone Characterization Map of the Cogmagun Area, Hants County, Nova Scotia, Scale 1:10 000. Nova Scotia Department of Natural Resources.

REFERENCES

Available upon request.

PORTFOLIO

www.barbaraperrott.weebly.com