

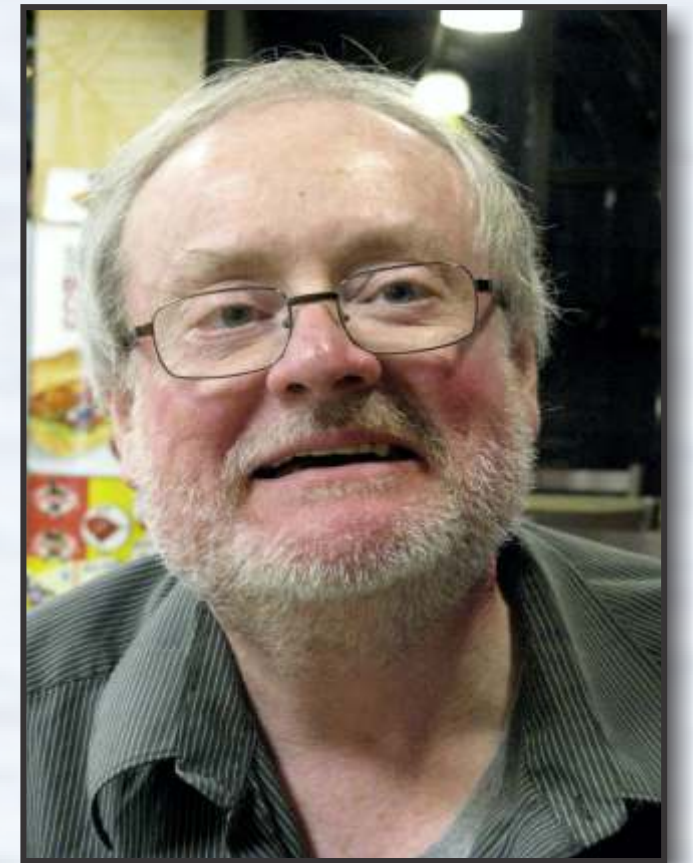
WHO WE ARE AND WHAT WE DO

Regional Geology Section



The Regional Geology Section is responsible for all bedrock mapping in the province as well as related geoscientific research. We provide the geological maps that support a diverse clientele, from the mineral exploration industry to prospectors, other government agencies and local communities.

Geologic maps provide critical information on the Earth around us and have many uses from exploring for mineral resources to hazard assessment and every aspect of land use planning and growth. Currently, there are nine staff members in the section; below highlights what we do.



ALANA HINCHEY Senior Geologist

BSc(Hons) *Queen's*, MSc *Memorial*, PhD *Carleton*

Alana is the Senior Geologist for the Regional Geology Section; prior to this she had been a Project Geologist in this section since 2006. Alana is responsible for the section administration and project development, as well as keeping busy with various research projects. Current projects include completion of the digital database and maps of the Makkovik area and continued collaboration with the Geological Survey of Denmark and Greenland (GEUS) on a project focused on the uplift history of the Province. Alana continues to work on unravelling the history of the Makkovik Province. She is also active on various geoheritage projects throughout the province, including the Aspiring Discovery Geopark on the Bonavista Peninsula, the Aspiring Cabox Geopark in the Bay of Islands region, the Mistaken Point Ambassadors, the Fortune Head Geology Center, the Geological Treasures Network of Eastern Newfoundland and the Drifting Apart – Northern Peripheries and Arctic Region Project of the European Union.

ANDREA MILLS Project Geologist

BSc(Hons) *Memorial*, MSc *Carleton*

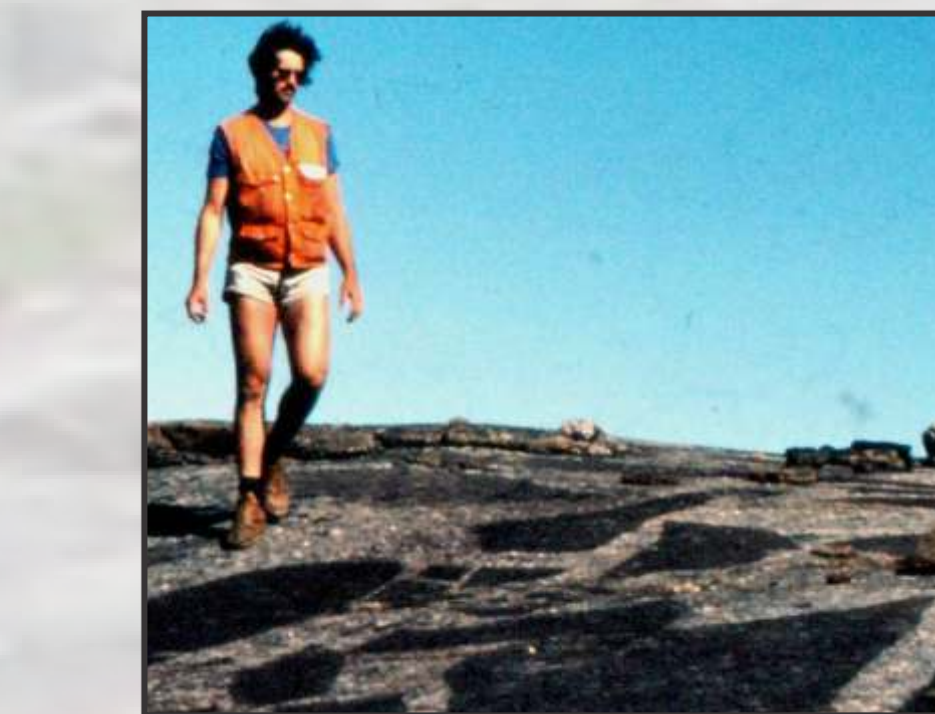
Andrea joined the Survey in March 2013, returning to field work after several years working for the Department in a regulatory capacity. She gained the bulk of her geological experience in Archean terranes in the Canadian arctic and subarctic (1997-2007), and is now conducting regional bedrock mapping in Neoproterozoic and younger volcanic and sedimentary rocks on the Bonavista Peninsula.



DOUG BOYCE Project Geologist

BSc(Hons) *Memorial*, MSc *Memorial*

Doug is an internationally recognized, published expert on Cambrian-Ordovician trilobites from Laurentia. With long-time colleagues Ian Knight, Uwe Balthasar, Lucy McCobb, David Rohr, Christian Skovsted, and Svend Stouge, he is involved in several international research projects focusing on western Newfoundland, southern Labrador, and North-East Greenland; some of these have received National Geographic funding. Doug is also Associate Curator of Paleontology at The Rooms Provincial Museum. In his spare time he is active in community theatre, singing and dancing.



BRUCE RYAN Project Geologist

BSc *Memorial*, MSc *Memorial*

Having spent his undergraduate and graduate summers from 1972 to 1975 in Labrador, Bruce joined the Survey as a member of the newly-minted Labrador mapping group in 1976. His work since then has entailed 1:100 000- and 1:50 000-scale geological mapping of diverse sedimentary, igneous and metamorphic rocks underlying central Labrador, the coastal area north of Postville, parts of the country between Voisey's Bay and Okakh Bay, and the Saglek-Hebron region.



JARED BUTLER Project Geologist

BSc(Hons) *Dalhousie*, PhD *Dalhousie*

Jared joined the survey as a Project Geologist in March 2017. He earned his PhD at Dalhousie University where he studied ultrahigh-pressure metamorphic rocks from Norway using a combination of mapping, petrology, and geochronology. He later held a Postdoctoral Fellowship at Dalhousie where he used numerical modeling to study the mantle-scale evolution of large orogenic systems. He recently completed his first field season with the survey, undertaking 1:50 000-scale geological mapping of Proterozoic sedimentary, volcanic, and intrusive rocks in the Labrador Trough.



IAN KNIGHT Project Geologist

BSc *Bristol*, MSc *Memorial*, PhD *Memorial*

Ian Knight's primary focus is the stratigraphy, chronostratigraphy and structure of the Cambro-Ordovician shelf rocks of the Humber Zone. Ongoing studies are investigating the early to middle Cambrian Forteau and Hawke Bay formations throughout the zone with Doug Boyce, and compiling and modifying 1:50 000 maps of the shelf sequence.

MONICA SQUIRES Geologist

BSc *Memorial*

Monica worked summers with the Geological Survey starting in 2008 as a student assistant, and in 2011 joined the MODS team in the Mineral Deposits Section. In 2012 she moved to Regional Geology to address archiving issues, including cataloguing of the paleontology collection housed at The Rooms Provincial Museum. Currently she provides vital support to the Regional Geology Section, including integration of digital data for project geologists, and is responsible for the management and maintenance of collections at the Survey's permanent rock-storage facility.



TIM VAN NOSTRAND Project Geologist

BSc *Memorial*, MSc *Memorial*

Tim worked as a field assistant in Labrador with the Survey during the 1980s and 1990s and joined the Survey full-time as a project geologist with the Regional Mapping Section in 2008. He is completing a synthesis of the geology, geochemistry and geochronology of the Mesoproterozoic Seal Lake Group in central Labrador. Tim is also compiling data collected from three field seasons of a 1:50 000-scale bedrock mapping project of the Archean Ashuanipi Complex of the Superior Province in western Labrador, a region which has the potential to host gold, base metal and PGE mineralization.



ANNE WESTHUES Project Geologist

BSc, MSc *Münster & Geomar Helmholtz Centre for Ocean Research*, PhD *Memorial*

Anne joined the survey as a Project Geologist with the Regional Geology Section in November 2015, after working in the Archean Ashuanipi complex in Labrador with Tim van Nostrand as a student field assistant in the summer of 2015. For her PhD project, she spent two summers in northern Sweden to study the Proterozoic Kiruna iron deposit and surrounding rocks. She is currently working on a bedrock mapping project of the Paleozoic rocks in the Bay d'Espoir area (South Coast of Newfoundland) that will integrate a recent detailed airborne geophysical survey with geological observations in the field.