#### AINA NEWS

## 2019 Scholarship Winners

Laurissa Christie, a Master of Science student in Biological Sciences at the University of Windsor, is the 2019 recipient of the Lorraine Allison Scholarship. Her research is focused on understanding the niche dynamics of deep-water species with different foraging strategies in relation to temporal and spatial variation. This study will take place at three sites in eastern Baffin Island: Pond Inlet, Scott Inlet, and Qikiqtarjuaq.

Lucas Brehaut, a PhD student in the Department of Geography at Memorial University of Newfoundland, is the 2019 winner of the Jennifer Robinson Memorial Scholarship. The goal of his research is to determine if wildfires accelerate the northward movement rate of boreal tree species in interior Yukon Territory. The outcome of his work will provide a better understanding of tundra ecosystem change and its impact on how key overwintering habitat for caribou may be affected.

# Quantifying Recent Shoreline Changes in the NWT

Current research being conducted at the Arctic Institute under the Northern Seas project by Drs. Ravi Sankar, Maribeth Murray, and Matthew Ayre is utilizing a geographical information system-based approach to analyze and model recent rates of coastal change in the hamlet of Tuktoyaktuk and the surrounding region. A time series of empirical shoreline data obtained from aerial imagery and Landsat satellite imagery covering the period 1984 to 2017 was used to quantify rates of shoreline movement. The data were incorporated into ArcGIS, and the AMBUR (Analyzing Moving Boundaries Using R) package was used to determine and evaluate rates of change to aid with likely mitigation strategies. Results indicate significant along-shore increases in the rates of erosion and the spatial extent of land loss across the study area over the past decade (2007–17). The relative impact of elevated hydrodynamics (increased wave energy and amplitudes) fuelled by recent major storms coupled with increases in air and sea-surface temperatures may be working to escalate erosion of this Arctic coastal landscape.

#### The ArcticNet Publications Database

The ArcticNet Publications Database (www.aina.ucalgary.ca/arcticnet) currently describes more than 4200 publications from ArcticNet, 358 publications from the Canadian Arctic Shelf Exchange Study (CASES), and 211 publications from the International North Water Polynya Study (NOW). There are now more than 4600 publications in this database, including 2900 refereed publications and 650 student theses. The Arctic Institute of North America is pleased to work with ArcticNet to provide this searchable archive of ArcticNet's refereed and non-refereed scientific publications.

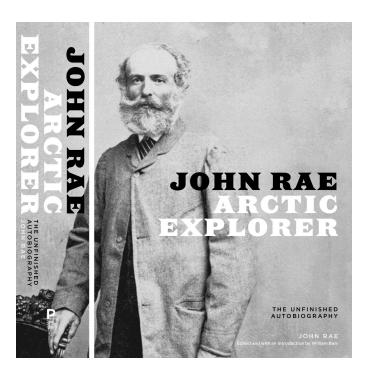


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### Publication of John Rae's Unfinished Autobiography

Polynya Press, an imprint of the University of Alberta Press, recently published a book by AINA Research Associate William Barr, titled John Rae, Arctic Explorer: The Unfinished Autobiography. The autobiography unfortunately ends during Rae's final Arctic expedition in 1854, about two weeks before Rae met the first Inuit who were able to provide him with information on the fate of the missing Franklin expedition. Professor Barr edited and wrote an introduction to the autobiography and has enhanced it by interspersing a selection of Rae's correspondence, particularly that to and from Sir George Simpson, the Hudson's Bay Company's Governor in North America. Barr has also summarized in considerable detail the remainder of Rae's life. Following his Arctic explorations, Rae mounted several more expeditions in more southerly latitudes, including a telegraph survey from Fort Garry (Winnipeg) to Quesnel on the Fraser River.

The extant manuscript covers all four of Rae's earlier Arctic expeditions and well over half of the final one. It also covers in detail his decade as a surgeon/trader at the Hudson's Bay Company's post at Moose Factory (possibly the best description of the layout and operations of a Company post) and also the challenging year Rae spent in charge of the Mackenzie District from his headquarters at Fort Simpson.

The book represents an extremely valuable addition to the literature on the exploration of Arctic Canada and also to that on the history of the fur trade. The book is available in either hard cover or PDF formats for \$60.00.

# Arctic in the Classroom

AINA's "Arctic in the Classroom" program was started voluntarily in 2010 by research associate Jon Dudley, who began taking Inuit artifacts in AINA's collection, along with many of his own, into Grade 2 classes to teach about Inuit culture and life in Arctic Canada. From these humble beginnings, the program has grown through word of mouth to many schools in and around the Calgary area. Now led by Michael Moloney and with Jon's assistance, the fun and interactive program has continued to grow, with over 60 sessions booked in 2019.