



The Arctic Institute of North America presents the 2017 – 2018

# Arctic Speaker Series

## Geocatastrophes in the North Seen Through Archaeology: The Shetland Islands Climate and Settlement Project

**Date:** Wednesday,  
February 21, 2018

**Time:**  
4:00 – 5:00 pm

**Location:** University of Calgary;  
Math Sciences 527

The damages and human disturbance caused by geocatastrophes often differ in their permanence from those of other kinds of extreme environmental events. This tendency makes human settlement in areas vulnerable to such disasters a particularly high-risk strategy, but one frequently offset by clear advantages during times of environmental stability. Marine coasts in northern areas are vulnerable to such catastrophic transformations, and global warming-related shifts in sea level and weather patterns are increasing those risks.

The Shetland Islands Climate and Settlement Project has been exploring these issues by investigating a geocatastrophe that occurred in Britain's northernmost islands over three hundred years ago. A community of four farms was completely overwhelmed and buried in wind-blown sand, and the formerly prosperous lands were never resettled. The US National Science Foundation-supported project is combining archaeological and archival analyses, along with a variety of environmental science approaches, to determine whether Little Ice Age climate changes triggered the disaster, and to learn how people responded to it on local, regional and national levels.



Excavated buildings from the the Broo Site, a farm that was completely buried in sand in the 1690s AD

**Biography:** Gerald Bigelow is a visiting associate professor of history at Bates College. He earned a BA at Columbia University and a PhD at Cambridge University. Over the last forty years, he has participated in archaeological field and laboratory research in the Shetland Islands, UK, and in Norway, Iceland, Greenland, and the US Northeast. As a museum curator, he worked with Inuit material culture from across the North American Arctic and curated exhibits on indigenous art and polar exploration history. He is a founder and board member of the interdisciplinary Journal of the North Atlantic. He directs the Shetland Islands Climate and Settlement Project, the only organization based outside the islands to receive an Environmental Award from the local government. His primary research interests include interactions between climate change and North Atlantic societies, early commercial trade in Norse settlement areas, and architecture as an environmental and social adaptation.

This event is **free and open to the public**

There will be a reception in the AINA offices (ES-1040) immediately following the presentation