Subaqueous Mass Movements and Their Consequences: Assessing Geohazards, Environmental Implications and Economic Significance of Subaqueous Landslides

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Dedication

Dr Brian D. Bornhold, 1945–2018

This year, we lost a great colleague and pioneer in our field of submarine landslide and tsunami research. Brian Bornhold (BSc, MA, PhD, ndc, PGeo) was the first graduate in earth sciences from the University of Waterloo in 1967. He acquired a master's degree in geology from Duke University and a PhD in 1973 from Massachusetts Institute of Technology and Woods Hole Oceanographic Institution. Brian began his career at the University of Toronto with one of the fathers of plate tectonic theory, J. Tuzo Wilson, and subsequently joined the Geological Survey of Canada in 1975. Throughout his career, he held an adjunct position at the University of Victoria. He retired from the GSC in 1998 and then worked with Coastal and Ocean Resources Inc., International Tsunamis Research Inc. and in academia with NEPTUNE Canada (now Ocean Networks Canada) as co-chief scientist. Brian published more than 125 refereed papers during his career and among these are some of the seminal works in submarine landslide research. I am thinking in particular of his 1982 paper on the *Morphology of a Submarine Slide in Kittimat Arm*, which he published with David Prior, James Coleman and Bill Bryant – an A-team of landslide researchers. He also published work on submarine landslides off Africa, China and in the high Arctic. Subsequent work became more quantitative in terms of addressing submarine landslide mechanics and tsunami generation with numerical modelling. This work included other well-known collaborators such as Rick Thomson, Alexander Rabinovich and Isaac Fine. Brian was instrumental in promoting the Ocean Drilling Program Leg for Saanich Inlet and it was in this program that we collaborated on most. The program resulted in at least 26 refereed publications and a special issue of the journal Marine Geology.

In 1992–93, Brian became Director of the Canadian Global Change Program at the Royal Society of Canada in Ottawa. He returned to the GSC following this appointment. In this capacity, and as an adjunct and then professor with the University of Victoria, he included and mentored many students and young scientists in his research. As academically accomplished as he was, Brian enjoyed fieldwork and fully involved himself in data and sample acquisition. He took great pride in the dirty state of his floater coat. Brian's work included all of Canada's ocean margins but most extensively in the Arctic and Pacific. Although not a storyteller per se, he had some amazing experiences, including a harrowing one of a polar bear attack on a fellow researcher in an Arctic field camp.

Brian was a perfectionist in all things that he undertook. Aside from his stellar academic career, Brian could speak impeccable French and was a highly accomplished musician – both singer and trombone player. He even authored a book on Early Music in Ladysmith, British Columbia, 1902–1912, for the Ladysmith and District Historical Society.

So, when next you are in the field and see on your geophysical records or in your sediment cores evidence of a submarine mass failure, give due credit to those who came before you and count among those one of the best – Dr Brian Bornhold.

David C. Mosher