

VOLCANIC ERUPTIONS & HAZARDS

SPEAKERS BIOGRAPHY:

Melanie Kelman started work with Natural Resources Canada in October 2007 during the Nazko region volcanic seismic swarm (which did not lead to an eruption). She has since devoted her time to volcano research, volcano emergency planning, and the preparation of educational materials. If volcanic unrest were to occur again in Canada, she would play a major role in monitoring, hazard assessment, and eruption forecasting.

Melanie was born in Victoria and after many wanderings has had the good fortune to return to the B.C. coast (Bowen Island). She completed her Ph.D. at the University of British Columbia, studying volcano-ice interaction at southwest B.C.'s Mount Cayley.

SESSION ABSTRACT:

Many Canadians are unaware that British Columbia and the Yukon possess more than 300 potentially active volcanoes. These volcanoes, many of which we know little about, pose a challenge to emergency planning: how does one prepare for a potentially large hazard with an infrequent but uncertain recurrence interval? Fortunately, eruptions rarely occur without warning but are typically preceded by days to years of warning signs, the most important of which is swarms of small earthquakes. Thus, the early warnings provided by Canada's seismograph network will allow us time to assess the situation and respond appropriately, depending on the location and history of the volcano and the nature of the warning signs.

Melanie Kelman will introduce Canada's volcanoes, discuss the likelihood of a volcanic eruption in or near Canada, and talk about how volcanic hazards (especially ash) may affect Vancouver Island and the Lower Mainland.