



SS08

The Polar regions as messengers of global processes

Derek Muir¹, Daniel Wunderlin², Susan Bengtson-Nash³

¹Environment Canada, Burlington, Canada

²Universidad Nacional de Córdoba, Córdoba, Argentina

³Griffith University, Australia

Processes in the Arctic and Antarctic are intimately connected with processes occurring in the rest of the world. Thus, what happens in the Arctic and Antarctic influences living conditions far away from the polar regions and vice versa. Global climate models predict that the polar regions will undergo the greatest warming of any areas. Sea ice is projected to shrink in both the Arctic and Antarctic under all greenhouse gas emission scenarios. In some projections, Arctic late-summer sea ice disappears almost entirely by the latter part of this century. With these projected changes will come changes in the pathways of transport of contaminants and of exposure of wildlife. Increased economic activity particularly for oil/gas and mining developments is likely and with it increased risks release of toxic contaminants from accidents and oil spills. Already these regions are becoming important study areas for investigations of contaminant-climate interactions. This special session will bring together invited experts on Arctic and Antarctic climate, changes in the cryosphere, and on the status of wildlife populations. The session will also consider implications for indigenous people in the Arctic.