Title: Sea ice processes and conditions according to Inuit experts in Igloolik, Nunavut

Authors: Gita Laidle and Theo Ikkumaq

Abstract: Sea ice formation occurs around Igloolik, Nunavut, within Furry and Hecla Strait and Fove Basin. Through extensive travel on, and use of, the sea ice slides and hunters in Igloolik have developed detailed and sophisticated descriptions of sea ice processes and conditions based on experiential learning, and sea ice continues to be important travel and hunting platform for the community. Collaborative research with these local experts was undertaken to learn about sea ice from local perspectives, as the specifics of local characterizations and uses are not well understood by the scientific community. Over two separate field seasons (coinciding with different stages of sea ice formation/decay between October 2014 and June 2015), a semi-directed interviews and sea ice trips were conducted to document the sea ice conditions, landlitter terminology, and descriptions shown in this poster. This conceptual model of seasonal freeze/thaw sequences was created to demonstrate the interactions between local sea ice conditions, as well as to highlight links with scientific sea ice terminology (where possible). By learning about Inuit understandings of sea ice we gain insights into Inuit knowledge, locally important ice conditions, and cross-cultural. Over the next few years we aim to expand, and impress upon, those results as part of the International Polar Year (IPY) Inuit Sea Ice Use and Occupancy Project (IPY 2007-2008) “Mapping Inuit Sea Ice Knowledge and Use”. We welcome ongoing community feedback and new contributors to this effort.