



The Circumpolar Flaw Lead Study

- The circumpolar flaw lead occurs each year when the central pack ice moves away from the coastal ice creating a 'flaw' in the ice surface. This occurs because the central pack ice is mobile, and the coastal ice is fixed to the shore.
- The flaw first develops in the fall, and in the colder winter season it remains as thin ice. It exists throughout the Arctic, occurring in North America, Norway, Iceland, and Siberia. The flaw has several interconnected polynyas. Polynyas are areas of open water that exist in sea ice.
- Because of reduced ice cover, these regions are very sensitive to atmosphere and ocean changes. They are unique and valuable areas to study.



- The objective of the Circumpolar Flaw Lead project is to examine how physical changes affect biological processes within the flaw lead. The system will be studied throughout its yearly cycle, to determine the effects of global warming.

- The Canadian Research Icebreaker (CCGS Amundsen) will spend the winter within the Banks Island flaw lead. The ship will be used as the point of research for this project.



- Through partnerships with the Inuit Circumpolar Conference (ICC) and Inuit Tapiriit Kanatami (ITK), this project will involve Inuit partners. Inuit will be involved in all aspects of the project.



- A photographic book will be created on the project. The book will emphasize the integration of science and traditional ecological knowledge.
- This project will make significant contributions to capacity building in Arctic communities.
- The Circumarctic Schools on Board program is involved.
- The CCGS Amundsen will visit coastal communities.
- The project will actively use local knowledge, and will include a community based monitoring program.



- Community outreach and Northern involvement are significant to this project.
- The project will support an opportunity for policy and decision-makers to discuss “Circumpolar Climate Change Impacts and Adaptations” in partnership with the Inuit Circumpolar Council.



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