

At the start of the project, a communication strategy document was developed. This will be reviewed and revised continually to take into account new developments in the project. The project website (www.arcticbiodiversity.com) will be the main dissemination tool and will act as the focal point for all communications and resources. The outreach team will facilitate and coordinate the publication of popular and scientific articles/posters and papers at meetings and conferences and, in cooperation with Eni, the outreach team will establish a press office and produce a press pack.

The development of ASBD as a project was possible because of the close links that Akvaplan-niva has developed both with its commercial and industry-based clients and its co-operation and participation in international,

European and national research networks and projects. The experiences gained in working with the MarBEF community have provided inspiration and ideas, partners and skills to establish a project which will provide a significant contribution to the understanding, conservation and management of the Arctic seas in relation to oil and gas development.

Acknowledgements

Akvaplan-niva would like to thank Eni-Norge and Eni E&P for the opportunity to carry out this exciting project, and particularly acknowledge the MarBEF community for the inspiration, experiences and close and friendly cooperation during the course of the network. We are proud to present ASBD as a product of the MarBEF cross-linking philosophy.

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CSI — INTERNATIONAL

International Polar Year event

Schools on Board



Schools on Board group, including students and teachers from Scotland, Norway, Sweden, Germany and Canada.

By David MacFadyen and Lucette Barber

In 2002, a network of Canadian Arctic scientists connected to the Canadian Arctic Shelf Exchange Study (CASES) and ArcticNet, supported the concept of creating an outreach programme that would increase awareness of research activities and introduce young Canadians, from coast-to-coast-to-coast, to the many opportunities that exist in the multidisciplinary fields of Arctic science.

Schools on Board was created to promote Arctic sciences through classroom materials and research fieldwork experiences, stimulating greater communication and face-to-face interactions between scientists, students and educators. Since then, ArcticNet and Schools

on Board have continued to open the doors of research to schools, providing spaces on board the CCGS *Amundsen*, Canada's state-of-the-art research icebreaker, and inviting them to join them in the Arctic, to learn about the sciences and knowledge behind Arctic climate change research, to experience for themselves the day-to-day activities of an Arctic field programme.

On Sunday, 13th of April, 2008, David MacFadyen, a final-year high-school student, and Helen Mackie, science-biology teacher, from Lochgilphead High School in Scotland, set off on their expedition to the Arctic as part of the Schools On Board Programme being run by the University of Manitoba to mark International Polar Year. To reach the Arctic, they had to fly to London, Toronto, Winnipeg, Edmonton, Yellowknife and then on to Inuvik, just south of the Beaufort Sea. This was a journey of nearly 7,000 miles and took two days to complete. At Toronto Airport, they met with the other international participants, who were from Norway, Sweden and Germany. They then met up with the Canadian participants in Winnipeg.

While in Inuvik, they were hosted by the Samuel Hearne High School, where they met local students and engaged in a morning of presentations and activities that focused on climate change issues in the Arctic and the perspectives of northern communities. They also met the Right Honorable Michaëlle Jean, Governor General of Canada, who happened to be in Inuvik on a northern tour at that time, and who interrupted her busy schedule to give the group an official send-off from the school.

After three days in Inuvik, where they learnt about the Inuit culture and the effects that climate change is having on their way of life, it was then on to the CCGS *Amundsen* icebreaker. This was the group's home for the next seven nights – an environment where the outside temperature plummeted to -23°C , with a windchill factor of -35°C . The ship is being used for the International Polar Year Circumpolar Flaw Lead system study, which has brought together over 200 scientists from 15 countries to examine the effects of climate change in the Canadian Arctic.

During their time on the ship, they had the opportunity to work with scientists from many disciplines, assisting them with their experiments on the ice. They also prepared a presentation for use on their return home. The time on the ship was a fantastic experience which will never be forgotten.

Although the work programme was intense, there was also the opportunity to relax and spend time socialising with the scientists, crew and fellow participants, including a game of ice hockey, which came to a quick end when a crack was discovered in the ice. This trip provided a once-in-a-lifetime opportunity to experience the harsh Arctic environment and see at first hand the work being done to monitor the impact of climate change.



David MacFadyen (left) works on an experiment with a Canadian student and his teacher, Helen Mackie (right). They are measuring the relationship between snow and sea-ice temperatures.



David MacFadyen processes a water sample in one of the laboratories on board the CCGS *Amundsen*.

The participants left the Arctic with a request from the scientists and the Inuit people to inform their own communities of the problems that are emerging as a consequence of climate change.

Since their recent return from the Canadian Arctic, David and Helen have been heavily involved in delivering a series of presentations to schools on their key findings about the impact of climate change. They intend to give more presentations to community groups. David has also given a radio interview to a local station and has provided information to the local and national press, which has resulted in several articles being published.

During their time on board the Canadian Coastguard icebreaker CCGS *Amundsen*, David and Helen had the opportunity to assist the scientists in many aspects of their research. This work highlighted a range of problems including

the reduced level of multi-year sea-ice coverage, which has many knock-on effects, exacerbating the plight of locals. As this phenomenon also impacts on ocean currents, its effects are, and will be, experienced across the world.

Both the scientists and the Inuvialuit elders urged David and Helen to spread the critical messages associated with these catastrophic environmental changes.

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