Frontiers in Polar Science: Current Activities of the Polar Research Board

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About the PRB

The Polar Research Board (PRB) is a unit of the National Academies dedicated to enhancing understanding of the Arctic, Antarctic, and high-latitude regions. The PRB facilitates participation of U.S. scientists in two international, nongovernmental, pan-polar scientific organizations—the Scientific Committee on Antarctic Research (SCAR) and the International Arctic Science Committee (IASC). It also acted as the U.S. National Committee for International Polar Year 2007-2008. The Board accomplishes its mission by:

- providing a forum for the polar science community to address research needs and policy issues;
- conducting studies and workshops on emerging scientific and policy issues in response to requests from federal agencies and others;
- providing program reviews, guidance, and assessments of priorities; and
- facilitating communication on polar issues among academia, industry, and government.

The PRB fulfills its mission using groups of volunteer experts charged to provide independent, carefully considered, written reports on critical scientific issues. The PRB conducts studies and other activities to address issues in the natural and social sciences, technology, environment, and resource management related to the Arctic, Antarctic, and high-latitude regions.

These activities provide comprehensive analysis and recommendations to decision-makers. They can take a variety of forms, from proceedings of workshops to detailed reports. In addition, the PRB assists in the dissemination and application of polar knowledge through meetings, workshops, coordination with other organizations, and various communication mechanisms including published reports, a web site, and contributions to newsletters and journals.

PRB activities are planned by the Board’s volunteer members, with help from a small staff. Because the PRB’s mission covers a substantial geographic portion of the Earth and a diverse range of disciplines, the PRB’s members are selected to bring both breadth and depth of experience. PRB members serve on the Board’s activities; they develop new initiatives, guide program planning, participate in SCAR and IASC, and DPI; and provide oversight to the ad hoc committees that conduct focused studies.

QUICK FACTS

- Established in 1958
- Promotes excellence in polar science
- Provides independent scientific guidance to federal agencies and the nation
- Works on issues in the Arctic, Antarctic, and cold regions in general
- Serves as the U.S. National Committee for
  - Scientific Committee on Antarctic Research (SCAR)
  - International Arctic Science Committee (IASC)

The PRB also served as the U.S. National Committee for International Polar Year 2007-2008, helping to initiate this global program and acting as a clearinghouse for dissemination and synthesizing the information generated.

OUTREACH EFFORTS

- Visit our website for report downloads, derivative products, and meeting information: http://dels.nas.edu/prb/
- Sign-up for our periodic e-Newsletter for exciting updates and upcoming events.
- Join us for webinar presentations following report releases.
- Participate in discussion forums on hot topics in polar research.

Who are the Academies?

The National Academy of Sciences was established by Congress in 1863 to provide independent scientific advice to the government and nation. Today, the Academy consists of three honorary societies that now merge to form the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine—collectively known as the National Academies. The Academy membership includes the nation’s most eminent scientists, engineers, and health professionals.

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Recent PRB Activities

A decade ago, the Commission on Arctic Change--one of the earliest task forces of the Board--identified two “flagship” questions for the polar regions: (1) what are the current state and trend of Earth’s highest, and windiest continent on Earth, the Arctic, and Antarctica, and (2) what will be the impacts of climate change on both of these regions, in terms of fundamental, scientific, and policy issues. The Board is pleased to announce the publication of a new report, Climate Change and Polar Regions: A 21st Century Perspective. This report, released on September 15, 2008, provides independent, in-depth, and current analysis on the status of climate change in the polar regions. The report identifies the need for comprehensive, balanced, and organized research in order to develop an understanding of the polar regions and their interactions with the rest of the world. The report also identifies key science questions that will drive research in Antarctica and the Southern Ocean.

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