

The Role of the National Oceanic and Atmospheric Administration in the Arctic Region

This issue of the *Arctic Research of the United States* profiles Arctic research carried out by the National Oceanic and Atmospheric Administration (NOAA). NOAA, an agency of the Department of Commerce, has four mission goals:

- To protect, restore, and manage resources in the oceans and the atmosphere;
- To understand climate change and variability;
- To fulfill weather and water information needs; and
- To support the commerce and transportation needs of the United States.

The breadth of science carried out at NOAA is spread between the NOAA National Weather Service (NWS), the primary source of weather data, forecasts, and warnings for the U.S.; the NOAA Ocean Service (NOS), responsible for the observation, measurement, assessment, and management of the nation's vast coastal and ocean areas; the National Environmental Satellite and Data Information Services (NESDIS), which provides timely access to global environmental data from satellites and other sources to promote, protect, and enhance the nation's economy, security, environment, and quality of life; NOAA's National Marine Fisheries Service (NMFS), which is dedicated to the stewardship of living marine resources through science-based ecosystem management; and NOAA's Oceanic and Atmospheric Research (OAR), which provides unbiased information to better manage the complex systems of the atmosphere, the climate, and ocean and coastal resources.

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This issue of *Arctic Research of the United States* presents to the Arctic community slices of NOAA's Arctic research life. Articles cover Arctic atmospheric, ocean, ice, and marine life research, in particular, the topics of Arctic Haze, the Barrow Atmospheric Baseline Observatory, declines in Pacific Arctic snow and sea ice cover, Arctic sea ice and ocean observations, the Alaska Ocean Observing System, the Arctic Ocean exploration program, the Russian–American Long-term Census of the Arctic, ocean climate changes and the Steller sea lion decline, the status of Alaska groundfish stocks and salmon fisheries assessments, and the status of marine mammals in the Bering/Chukchi Seas. In addition, there are articles from individuals who receive external research funding from NOAA.

To wrap up these timely Arctic research topics, the National Snow and Ice Data Center presents an article on the creation of environmental data sets for the Arctic. Calling on the history of former International Polar Years, this article raises critical questions about the future role of data centers during the upcoming International Polar Year (IPY).

As the United States rapidly approaches the IPY of 2007–2008, NOAA is poised to make important, innovative, and far-reaching inroads into the further exploration and understanding of the Arctic region and to help create a legacy of polar research and observational platforms vitally important for the present-day and future understanding of the Arctic's influence on the climate of the earth.