

NOAA Office of Ocean Exploration and Research (OER) Polar Expeditions and Projects, 2002-2008



1. Exploring Alaska's Seamounts, June 22 – July 15, 2002.

The Gulf of Alaska is a Pacific water body that is bordered by the southern coast of Alaska and the western coast of Canada. This glorious region is home to some of the largest glaciers on earth, and the cold, nutrient-rich waters of the Gulf support a diverse ecosystem that includes numerous species of fish and shellfish, as well as many marine mammals and large colonies of birds. More information at: <http://oceanexplorer.noaa.gov/explorations/02alaska/>



2. Arctic Exploration, August 15 – September 8, 2002.

On the Arctic 2002 Expedition, 46 scientists from the United States, Canada, Japan and China gathered by ship and charter aircraft at the little Alaskan town of Kugluktuk. The expedition on board the Canadian Coast Guard icebreaker *Louis St. Laurent* lasted 24 days and covered 2,440 nautical miles, mostly through ice-covered waters of the Canada Basin. More information at: <http://oceanexplorer.noaa.gov/explorations/02arctic/>



3. Mapping the Arctic: Exploring the Unknown Ocean, Sept. 1 – 10, 2003.

This September, Arctic and hydrographic researchers led by Dr. Larry Mayer from the Center for Coastal and Ocean Mapping at the University of New Hampshire embarked on a 10-day Arctic Ocean mapping expedition exploring the Chukchi and Northwind Ridge. The Arctic Ocean is our world's least explored ocean, and this mission focused on creating detailed bathymetric maps in a unique area located in the U.S. Exclusive Economic Zone (EEZ) north of Alaska. More information at: <http://oceanexplorer.noaa.gov/explorations/03arctic/>



4. Russian-American Long-Term Census of the Arctic (RUSALCA) 2004 : Initial Research Cruise to the Bering and Chukchi Seas, July 23 – August 24, 2004.

On July 23, 2004, a Russian research ship, the *Professor Khromov*, leaves Vladivostok, Russia packed with U.S., Russian, and Canadian scientists. It marks the beginning of a 45-day collaborative journey of exploration and research in the Arctic. It's also an historic day for both Arctic research and exploration as well as Russian-U.S. relations. More information at:

<http://oceanexplorer.noaa.gov/explorations/04arctic/>



5. Exploring Alaska's Seamounts, July 30 – August 23, 2004.

The 2004 Gulf of Alaska Seamount Expedition was a great success. Thanks to good weather and a hard-working crew, we made 17 of 18 planned dives on five seamounts in the Kodiak-Bowie Chain – a potential record for the region! Many people on board had participated in the the previous Gulf of Alaska cruise in 2002, when we lost only one dive to bad weather. Clearly, Mother Nature has treated us well during our visits to this unique and potentially turbulent region. More information at:

<http://oceanexplorer.noaa.gov/explorations/04alaska/>



6. The Hidden Ocean Arctic 2005, June 27 – July 26, 2005.

The Hidden Ocean 2005 Expedition focused on assessing the diversity of life and the environment in all three major realms of the Arctic - the sea ice, the water column and the sea floor. For one month, 35 members of the science party and 75 Coast Guard crewmembers worked together on board the US Coast Guard Cutter *Healy* to conduct round-the-clock science operations. More information at:

<http://oceanexplorer.noaa.gov/explorations/05arctic/>



7. Sounds of the Southern Ocean, December 3 – December 13, 2005.

The Southern Ocean surrounds Antarctica and serves as a conduit between the Atlantic, Pacific and Indian oceans. Yet because of severe climatic conditions, much of this ocean basin remains unexplored. Polar regions play key roles in the global environment and one goal of our project is to document linkages between changes to the Antarctic ice sheet and the volcano-tectonic seafloor processes in the region. More information at:

<http://oceanexplorer.noaa.gov/explorations/05sound/>



8. Submerged Cultural Resource Management on the Last Frontier : Reconnaissance, GIS Mapping, and Biotic/Geochemical Characterization of Threatened Shipwreck sites in Southern Alaska, April 4 – April 12, 2006.

In April 2006, Alaska's Office of History and Archaeology (OHA) collaborated with the University of Alaska Fairbanks (UAF), the University of Rhode Island (URI), the U.S. Minerals Management Service (MMS), and the NOAA National Marine Sanctuary Program to collect information on several historic shipwrecks in Southeast Alaska. More information at:

<http://oceanexplorer.noaa.gov/explorations/06alaska/>



9. Tracking Narwhals in Greenland, August 2006 – March 2007.

From August 2006 to March 2007, scientists from the University of Washington and the Greenland Institute of Natural Resources instrumented narwhals with satellite-linked time-depth-temperature recorders to track whale movements, diving behavior, and ocean temperature structure in Baffin Bay. The instruments collected water column temperature profiles in the pack ice to more than 1500 meters in depth when narwhals make a fall migration from north Greenland to their wintering grounds in Baffin Bay. The instruments collected water column temperature profiles in the pack ice to more than 1500 meters in depth when narwhals make a fall migration from north Greenland to their wintering grounds in Baffin Bay. More information at:

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10. Extended Continental Shelf (ECS) Arctic Seismic Mapping 2008 – Ongoing project. More information: <http://www.ngdc.noaa.gov/mgg/ecs/ecs.html>.

