

NOR'EASTER

MAGAZINE OF THE
NORTHEAST SEA GRANT PROGRAMS



Sea Grant
National Sea Grant College Program

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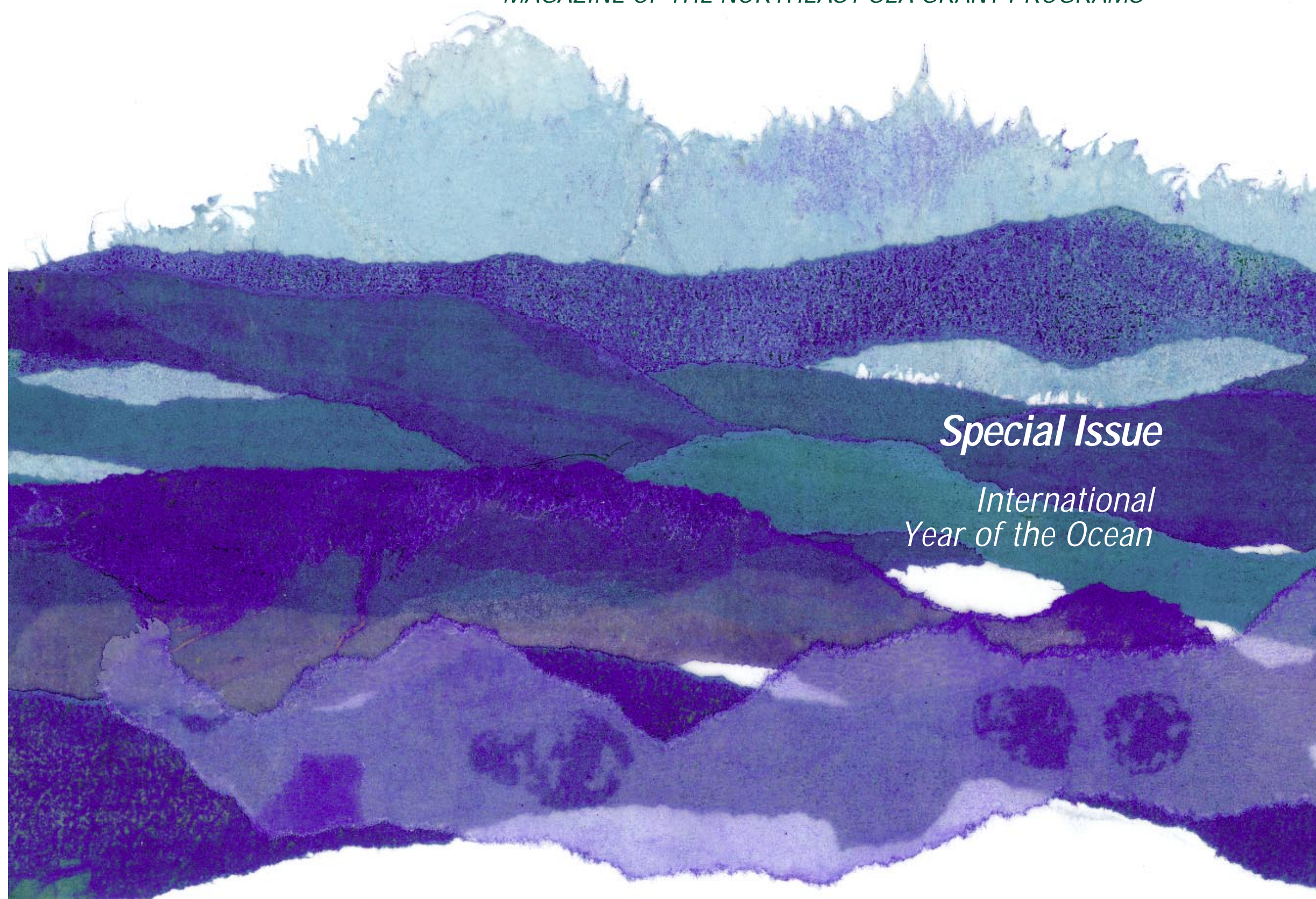
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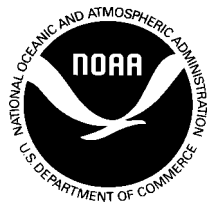
MAGAZINE OF THE NORTHEAST SEA GRANT PROGRAMS

Special Issue
International
Year of the Ocean



OCEANS

A PARTNERSHIP APPROACH



BY D. JAMES BAKER

Under Secretary for Oceans and Atmosphere

Administrator, National Oceanic and Atmospheric Administration, U.S. Department of Commerce



Dr. Baker delivered this year's Doherty Lecture on Oceans Policy, a presentation of the Center for Oceans Law and Policy, University of Virginia. Below is an excerpt of his remarks.

Like so many Americans, I have been touched by the sea. From my childhood, when I fished at the docks and in the deep sea with my father and brother, the ocean has been an integral part of my life. And from childhood, I knew that it always would be.

Today, my hometown of Long Beach, California, is one of the largest ports in the world. The city of Long Beach surrounds Signal Hill, which taps a rich and valuable reservoir of oil that is now being drilled offshore. Long Beach has become one of many coastal communities where we clearly see the impacts we have had on the ocean environment as well as the many resources the ocean provides.

For, as the world's population grows, it is putting increasing demands on the ocean and its resources. Conserving and wisely managing the ocean is a greater challenge than ever before. U.S. coastal counties now account for 17 percent of the nation's contiguous land area, but they are home to more than 53 percent of the U.S. population. The coastal population is increasing by 3,600 people per day. By 2015, we project a total increase of 27 million people. This growth will be accompanied by increasing demands on infrastructure and greater investment in coastal development and capital.

The economic costs of hurricanes and natural hazards continue to climb; they now total about \$50 billion per year. Our infrastructure is not keeping pace with the needs of our coastal population, and insurance companies

warn that the situation amounts to a disaster waiting to happen.

Around the coasts, we are changing the chemistry of our waters, and this leads to changes in biology. I believe that these changes are as significant as the changing chemistry of the atmosphere that is driving climate change. We must take it seriously. Nonpoint source pollution from metropolitan and agricultural regions poses a particularly difficult problem for coastal water quality. In some cases, the input of nutrients from land-based sources has contributed to the growth of harmful algae; we believe that these nutrients contributed to the growth of *Pfiesteria* in the Chesapeake Bay estuaries last year. Nonpoint source pollution can only be addressed by involving many players—from the agricultural, manufacturing, and transportation sectors to government agencies, communities, and individuals.

Some of our most important successes in addressing ocean issues have resulted from collaboration among many different players. Coalitions, associations, and cooperative ventures—all various groupings of stakeholders that I will refer to as partnerships—are the way we must approach the future. Partnerships have become a key to managing the ocean—from working with regional fishery management councils to address declines in fisheries to working with states, tribes, and communities to protect endangered species and enhance coastal resources.

A National Ocean Conference, the first of its kind, was held recently in California to bring together individuals with the knowledge, interest, and expertise needed to address complex ocean issues. As President Clinton emphasized in his proclamation recognizing 1998 as the Year of the Ocean, "Because the ocean is a treasure that

all nations of the world share in common, we must work in partnership to become wise stewards of its many riches. We must strive together—at local, national and international levels—to preserve the ocean's health, to protect the marine environment, and to ensure the sustainable management of the myriad resources the ocean contains."

Over the years, the National Sea Grant College Program has been especially effective in identifying and bridging collaborative opportunities. By engaging the academic community and private sector in coastal and marine research, Sea Grant has generated new discoveries, improved management techniques, and economically valuable applications. NOAA's new Coastal Services Center in Charleston, South Carolina, is yet another example of a successful partnership among government, academia, industry, and coastal communities. A similar operation has been established in New Hampshire.

NOAA has other key partnerships. With the support of local authorities and the maritime user community, PORTS is now operating in several ports around the country. NOAA developed PORTS, Physical Oceanographic Real-Time Systems, to provide real-time water level, current, and other oceanographic and meteorological data to ship masters and pilots, helping them avoid costly groundings and collisions.

This year, in particular, is an exciting time for those interested in the ocean. The Year of the Ocean invites us all to take a fresh look at how we can enhance the ocean and its resources. As we near the 21st century, I believe that the keys will be partnerships, education, and exploration. The challenges are great, but so, too, are the opportunities.

SPECIAL CENTER INSERT

SoundFacts and Activities

Fun facts and learning activities related to Long Island Sound and other estuaries.

by Peg Van Patten, Milton Moore, Eamon O'Muin, Barbara Branca



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by Malia Schwartz and Scott Nixon, Rhode Island Sea Grant

To one person, a tool of the trade. To another, a work of art. A pictorial guide to fish traps around the world.

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by Judith E. McDowell, Woods Hole Oceanographic Institution Sea Grant

A Sea Grant director offers a retrospective on Sea Grant in this, the program's 30th anniversary and Year of the Ocean.

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by Tony Corey, Rhode Island Sea Grant

From environmentalist mantra to a matter of law, marine mammal protection raises the stakes around the table.

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by Andrea Cohen, Massachusetts Institute of Technology Sea Grant

Scientists, fishermen and marine explorers talk about the thrills (and trials) of long stays at sea.

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by Lawrence Hamilton and Cynthia M. Duncan, University of New Hampshire;
and Nicholas Flanders, Dartmouth College

Global change and declining stocks leave fishing communities of the North Atlantic struggling for economic and cultural survival.

PAGE 32 Far From Home: Sea Grant Researchers Go Global

by Melissa Waterman, Maine Sea Grant

Solving oceanographic puzzles on the world's far-flung seas: For these Sea Grant researchers, field work isn't a job, it's an adventure!

PAGE 36 Turning the Tide on Harmful Algal Blooms

by Barbara Branca, New York Sea Grant

Red tide, brown tide, *pfiesteria*. Mobilized researchers are experiencing a bloom in knowledge about the causes and mitigation of harmful algal blooms.

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by Brett Branco, Connecticut Sea Grant

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