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## A tribute to Peter Borrelli

by Robert Ross, Ed.D., Chairman

Peter Borrelli is moving on after eleven years as executive director of the Provincetown Center for Coastal Studies and is leaving a legacy and a list of accomplishments that will long be appreciated and recognized. Under his leadership the Center has grown in stature and recognition around the world for its accomplishments in advancing scientific research, influencing public policy and providing public education related to marine mammals and the coastal ecosystem.

Peter has distinguished the Center by extending our educational efforts through a creative partnership with the Ocean Classroom Foundation. The award-winning, at-sea Mass Sail education programs provided to school and college students across the region have been heralded for their quality and the access provided to inner-city and local Cape Cod youth.

Peter's dream of a state-of-the-art marine laboratory capable of containing and allowing the Center's science programs to grow required his powerful vision, dogged determination and creative flexibility to find a space and a viable plan. Once the space was identified as the 1960's-era former high school annex building, Peter invested all of his energy and his great skill in planning and managing complex projects with his ability to cultivate the generosity of Center benefactors. The measure of his success is this month's dedication of the Hiebert Marine Lab.

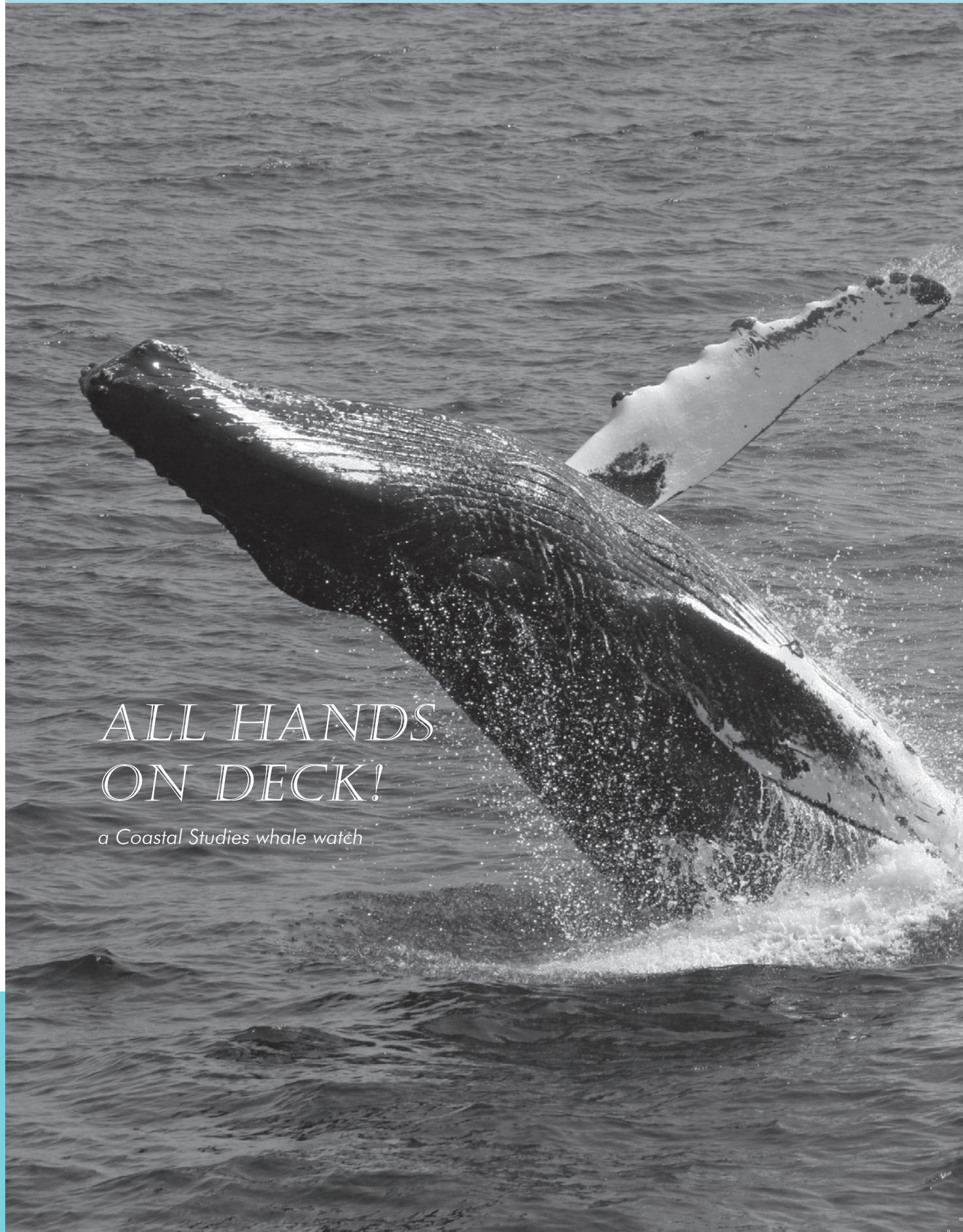
Peter's name is well-known in the arena of ocean management and marine public policy, and his passion for the importance of ecosystem-based management is clearly evident in the establishment of the Cape Cod Bay Ocean Sanctuary and Monitoring programs, which he leaves firmly established as they embark on their second season. Peter also leaves a fleet of four research and rescue vessels at the Center's own MacMillan Pier float, all of which were acquired, refitted and launched during his tenure.

Thanks to the extraordinary leadership of Peter Borrelli, the Provincetown Center for Coastal Studies is a profoundly stronger institution. It is poised to move forward in its efforts to conserve endangered whales and marine ecosystems and in service to the marine environment overall. On behalf of the Board of Directors I want to say it has been an honor and a pleasure to work with such a gifted and tireless leader. We will always hold him close to our hearts and the work of the Center.



# COASTWATCH

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## ALL HANDS ON DECK!

*a Coastal Studies whale watch*

### COASTWATCH

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COVER PHOTO: Humpback whale Eden breaching. Photo Joanne M. Jarzowski, PCCS.

# Unfinished Business

I have been writing these Harbor Notes for nearly a dozen years but these will be my last, as I will be turning the helm over to Richard Delaney on July 1. Rich, who until April served the Center as a member of the board, is a former director of the Massachusetts Office of Coastal Zone Management and founder of the Urban Harbors Institute at UMass-Boston. During his time with CZM the Commonwealth took on the enormous task of cleaning up Boston Harbor. And one of his first assignments at Urban Harbors was to assemble a natural resource inventory in support of the designation of Stellwagen Bank as a national marine sanctuary. In these capacities he has distinguished himself as a thoughtful and effective advocate of ocean protection and management.

After some time in the Adirondacks hiking and kayaking, I will return to Cape Cod. I have no immediate plans other than to slow down and to begin to act my age. There is so much unfinished business, it will not be difficult to find a way to rechannel my energies.

I have asked many of my colleagues of late if they thought the whales of New England were any better off today than they were, say, twenty-five years ago. Overall, on a scale of one to ten, I would have to say that while public awareness and research have grown from a two or a three to a seven, environmental protection has not advanced very much at all.

At this very moment the International Whaling Commission is debating whether to lift a twenty-five-year moratorium on commercial whaling. Regardless of the outcome of this year's debate, the fact is that not all countries respect the moratorium. As Joshua



Reichert of the Pew Environment Group recently noted prior to the meeting of the IWC, "Unless the global community can find a better way to address some of the weaknesses of the current whale conservation regime, these animals face an increasingly uncertain future." In the past year alone, more than 2,000 whales were killed for commercial purposes or bogus scientific research.

On a national and regional level, there is little or no evidence to suggest that the problem of whale entanglement, which is part of an even larger fisheries problem of by-catch, is nearing solution. Massachusetts has made significant strides in the direction of "whale-safe" fishing gear, but the whales know no political boundaries and the Center's whale disentanglement team has never been busier. It is ironic that the same agency charged with protecting marine mammals is part of the Department of Commerce. The issues are complex and solutions evasive, but still it strikes many that the National Marine Fisheries Service places far too much emphasis on self-regulation of an industry that historically has shown no restraint.

Our colleagues at the New England Aquarium, Scott Kraus and Rosalind Rolland, have just edited an important new book entitled *Urban Whale* (Harvard University Press). It describes the plight of the Northern right whale and the heroic efforts of scientists and environmentalists to protect it from extinction. But Scott and Rosalind have succinctly defined the problem in the title of their book and it extends to more than this one species. Much of the marine life we seek to protect resides in a congested, noisy, and polluted urban sea.

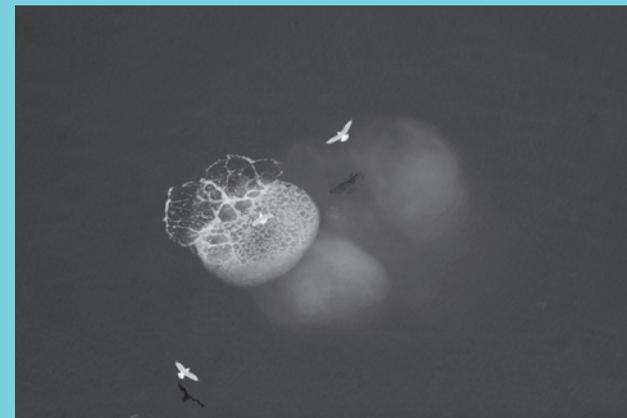
The movement to set aside marine protected areas now underway is long overdue. If we cannot save the most fragile and ecologically significant areas, we will not be able to save anything. This was the idea behind the National Marine Sanctuaries Act of 1972. To date, a total of fourteen areas from New England to the Florida Keys to Hawaii have been designated. But how many of these areas provide true sanctuary for marine life? During the late '80s, congressional designation of Stellwagen Bank in Massachusetts Bay was one of the Center's highest priorities. This happened in 1992. But in the ensuing fifteen years, the sanctuary has had nothing but a makeshift management plan in place. By law the sanctuary is required to revise its management plan every five years. A dozen or more working groups and hundreds of scientists, resource managers, educators, fishermen, and others have worked diligently for the past ten years to develop what essentially would be the sanctuary's first real management plan. But as I write these final notes, the plan has become mired in interagency squabbling over who will manage the ocean and for what purposes.

Some things never change. As a mentor of mine explained long ago, government does not lead; it follows. That is why organizations like the Provincetown Center for Coastal Studies are so important. With good science, strong convictions, and the will to pursue coastal solutions, we can make a difference. The designation of Stellwagen Bank as a national marine sanctuary is meaningless without adequate funds to manage it and without a plan that gives meaning to the word "sanctuary." Let's make sure that this critical area is protected on our combined watch.

## RICHARD DELANEY JOINS PCCS AS EXECUTIVE DIRECTOR



As Center staffers, board members and supporters bid a fond farewell to Peter Borrelli at the dedication of the Hiebert Marine Laboratory on June 21, they waved hello to incoming Executive Director Richard F. Delaney. Known as "Rich," Delaney has a long and impressive record of ocean advocacy and policy work. A founder of the Urban Harbors Institute at UMass-Boston and former director of the Commonwealth's Coastal Zone Management office, Delaney recently told the *Provincetown Banner*, "My career has always been focused on coastal and ocean-related issues." His goals include increasing the use of the Center's scientific expertise in the area of state and federal policymaking and drawing its membership and local community members closer to the work they are supporting by making it into a "marine community center."



### NOT CHILD'S PLAY:

*Humpback whales create huge bubble clouds to confuse and trap one of their preferred prey species, schooling sand lance (above, shown at actual size), which they then swallow after squeezing a mouthful of sea water out through the baleen plates that hang from the roofs of their mouths. Photos: PCCS Staff.*

## Hiebert Marine Lab: Honor Roll of Donors

Scores of individuals, businesses, foundations, and organizations contributed gifts, talents and energy to the creation of the Hiebert Marine Lab. They are recognized below.

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## ALL HANDS ON DECK:

a Coastal

Studies whale

watch



“Up at 11 o'clock!!!”

That cryptic exclamation, shouted excitedly by Marine Educator Katelyn Collins, is whale watch code for the 19<sup>th</sup> century version of virtually the same alert, “Thar she blows!”

It means that passengers should look over the forward rail on the port, or left, side of the whale watch boat, assuming the vessel is a giant clock and the bow points to high noon. And it immediately results in a throng of whale watchers aboard the *Portuguese Princess* rushing to the rail of the 100-foot vessel, so that one is reminded of that amusing television commercial, “Columbian coffee is being served on the port foredeck.”

The crowd is rewarded by the vision of a sleek swift shadow—a shadow flying just underneath the surface of the water, an enormous shadow two-thirds the length of the boat itself—and the streak of a scythe-like dorsal fin slicing through the surf.

“Ooooooh!” “Wonderful!” “He’s just HUGE!”

The majority of passengers are reacting to their very first sighting of a great whale—in this case a fin back whale known locally as “Loon.”

Yet as beautiful and big as they are, the finbacks are not the stars of the show for most whale watchers. They have come to see “in person” the whale from the Pacific Life commercials, the whale on the whale watch brochures—*Megaptera Novaengliae*, the “big-winged” humpback whale—the one that flings all 40 tons of itself into the air like an ocean-going jet. The one that sidles up to the boat and pivots its head around to train that giant, curious eyeball on the gaping faces of those smaller critters leaning over the rail.

Or not.

Because in reality, it is not a “show.” Passengers aboard a Provincetown Center for Coastal Studies whale watch learn very quickly that they are not spending a day aboard a floating Sea World.

They begin to understand that they are privileged witnesses to what scientists call “opportunistic sightings” of animals in the wild. That they have no say in the afternoon’s proceedings; that an important

part of their trip is a research cruise to gather vital data on one of the most studied whale populations on earth; and that the one grand exclamation point of a fin whale’s dorsal fin may be all they see for an hour, or for the entire trip.

But that is also what makes it exciting. And genuine. And worthwhile. Center whale watchers are witnesses to field science in action, to the randomness of nature and to the behavior of some of the world’s greatest creatures.

The Center’s whale watch program, designed by its award-winning Director of Marine Education Joanne Jarzowski, may have participants on one trip pulling up a plankton net full of microscopic copepods, the tiny zooplankton that serve as food to the Northern right whale; another reporting in to the rescue team that their vessel has spotted a whale entangled in fishing gear.

In actuality, they most likely *will* see a great many of some of the largest animals on earth because the Gerry E. Studds-Stellwagen Bank National Marine Sanctuary is one of the top ten places in the world to go whale watching. But no matter what they see, almost all of them come away with a sense of awe and even accomplishment.

Doris Shakin of Silver Springs, Maryland, began the trip on a late May afternoon fervently hoping she was “really going to see something.” At trip’s end, after encounters with the fin whale, and several humpbacks displaying a variety of behaviors, she said, “Now my life is complete. This old lady has waited a long time for this. I have never seen a whale until today.”

*For more information about the Center’s whale watch program, including species likely to be sighted, biographies of its many experienced educators, and comprehensive field notes, please visit the website at <http://www.coastalstudies.org/what-we-do/education-programs/whale-watching/whale-sightings.htm>*

# ANATOMY OF A MARINE LABORATORY

The Hiebert Marine Laboratory houses several diverse scientific, conservation and education programs and community spaces. For complete program information, please visit [www.coastalstudies.org](http://www.coastalstudies.org).

## New science/education quarters dedicated as Hiebert Marine Laboratory



The ribbon-cutting was executed by (from left to right) Peter Borrelli, Bob Ross, Stormy Mayo, Barbara Birdsey, Ed Fitzgerald, Graham Giese, Ian Bowles, and Rich Delaney.

With an Old Testament invocation of God's creation of the oceans and a 21<sup>st</sup> century vision to preserve and protect them, the Provincetown Center for Coastal Studies dedicated its newly renovated lab facility as the Hiebert Marine Laboratory on June 21, in memory of longtime Center board member and supporter Ruth Hiebert, and of her father, Daniel Hiebert, at one time the town's only medical doctor.

The halls and labs of the 11,000-square foot building at 5 Holway Avenue streamed with townspeople, government officials, staff, board members, friends and supporters of the Center both before and after the ceremony, which was followed by an open house and the opening of a special poster exhibit about the U.S. coastal survey on loan from NOAA and the Smithsonian Institution.

Although June 21, 2007 was Dedication Day, LDA Architects of Cambridge and Acella Construction Corporation of Norwell first entered the building on November 1, 2005, when a three-phase renovation began that would culminate 18 months later in an environmentally-friendly, state-of-the-art facility.

As outgoing executive director Peter Borrelli noted in his remarks, "Every effort was made to make this building as environmentally efficient as possible," adding, "The carpet is recycled and I'm told, even edible." Not only is the carpet recycled, but also the entire building, which was built in 1964 as a parochial school of the lab's next-door neighbor, St. Peter the Apostle Catholic Church.

Before an overflow crowd in the newly anointed Larkin Hall, State Senator Rob O'Leary read a proclamation and made the personal observation that, "This institution is a jewel in the Commonwealth of Massachusetts, focusing our attention on marine conservation issues and the health of the oceans."

Keynote speaker Ian Bowles, the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs, noted that his newly-renamed agency was reorganized by Governor Deval Patrick to recognize the inextricable and inevitable connection between energy and the environment in the 21<sup>st</sup> century, noting that it was a "particular pleasure to be in an example of the kind of building we should all be working in."

While Bowles recognized the Center's contributions to the development of whale-safe gear and its vigilance of right whales in Cape Cod Bay, Borrelli recognized the fierce dedication Ruth Hiebert had for the Center nearly from its inception, saying he always appreciated what he called her "practical philanthropy;" that is, the gift of a new furnace or pick-up truck; hosting a potluck supper at her home for board and staff; and, "on more than one occasion, a quiet check to make payroll."

Hiebert Charitable Foundation Trustee Ed Fitzgerald added that "Ruth had a home where the Center first existed, and Doc Hiebert talked about water quality in Provincetown Harbor when people still thought you could toss anything into it."

Borrelli thanked the other lead donors, many of whom were in attendance, including Barbara and Charles Birdsey, and the Pegasus Foundation; Mark Silva, Roslyn Garfield and Phyllis Temple; Thomas Niles, Alix Ritchie and Marty Davis, the executors of the Michael Rice estate, Mary and Anne Keenan; and Brian Larkin of the Allsop Foundation [a complete listing of donors and a directory of the marine lab appears in this issue].

Borrelli also thanked the members of the Center's Siting Committee, including Silva, Garfield, Mick Rudd and John Burman; the School Committee, the Board of Selectmen, the town's voters, and particularly recently retired Town Manager Keith Bergman, "who made a personal commitment to this project from the beginning, with the attitude, 'Let's make this happen.'"

After the ceremonial ribbon was cut, State Representative Sarah Peake presented a surprise proclamation to the man Board Chairman Robert Ross credited with the "dogged determination" and vision to undertake the nearly impossible task of creating an 11,000 square-foot marine lab for a non-profit with a limited budget in the tight Provincetown real estate market. It recognized Peter Borrelli as an outstanding leader in marine environmental advocacy and thanked him for his nearly twelve years of service.

Ross announced that the board had voted to name the lab's new exhibit space for him; and newly appointed Executive Director Rich Delaney told him, "You have done a terrific job. I have seen the long hours, the hard work, and the dedication." Borrelli responded by saying it had been "an honor and a privilege" to lead the Center and received a standing ovation from the crowd.

## Charles Birdsey Entanglement Response Center



Home to PCCS' **marine mammal rescue program**, the Center provides rapid response to marine animal entanglements. Since the program began in 1984, Center rescuers and members of the Atlantic Large Whale Disentanglement network have rescued over 80 large whales from life-threatening entanglements in fishing gear.

## Peter R. Borrelli Exhibit Hall

Currently housing a special poster exhibit on loan from the Smithsonian Institution and NOAA, *From Sea to Shining Sea: 200 Years of America's Coast Survey*, the hall will be available for use by myriad organizations for exhibits of marine-related art and scientific educational displays.

## Edward S. Friedman Aerial Survey Lab

Home to the **aerial survey** and **focal follow programs**, which conduct population and behavioral research on the critically endangered North Atlantic right whale. The remaining population of 350-400 individuals face ongoing threats from ship strikes and entanglement in fishing gear.

From late winter through early spring, PCCS conducts bi-weekly aerial surveys of feeding right whales, using photo-identification techniques to match each whale spotted to the New England Aquarium's right whale catalog. The catalog is used to help determine distribution, movements, residency, and demographics. During the same period, whales are followed by boat and their sounds recorded by hydrophone to better understand behavior and vocalizations.

## Habitat Studies Lab



The North Atlantic right whale is a filter feeder, using its baleen to filter microscopic organisms, called zooplankton, from the water. In right whale season, the **habitat studies program** conducts weekly cruises to monitor the distribution of right whales in relation to zooplankton prey patches within the bay.

## Humpback Studies Lab

The **humpback whale studies program** seeks to advance understanding of humpback whale biology, population status and human impacts. Research is conducted through photo-identification and biopsy sampling. The PCCS catalog is the most extensive of its kind for a large whale species.

## Larkin Hall

A community meeting and event hall, Larkin Hall is one of the largest public gathering spaces in Provincetown. Equipped with a large projection screen, it is available to groups and organizations for non-profit educational, cultural and scientific purposes.

## Barbara Mayo Marine Education Center

The home base for the **whale watching** and **MassSail** at-sea education programs, the center collaborates with Portuguese Princess Excursions and the Ocean Classroom Foundation, respectively, to guide **whale watch** trips and teach marine science aboard the OCF's 125-foot schooner, *Spirit of Massachusetts*.

## Thomas H. Niles Coastal Studies Laboratory



The **Marindin Project** is a collaborative effort between PCCS and Cape Cod National Seashore to develop a current model of sediment erosion, transportation and deposition of outer Cape Cod's coastline. By resurveying Henry Marindin's transects from the late 1800's, the project can determine the annual rate of erosion, and to determine where erosion ends and deposition begins.

The **Cape Cod Bay Monitoring Program** draws weekly samples from over 40 stations along the shoreline and throughout Cape Cod Bay. Samples are analyzed for temperature, salinity, dissolved oxygen, turbidity, chlorophyll a, and nutrients. Through continual effort to understand this fragile system, we can take suitable steps to protect it.

The **Cape Cod Bay Ocean Sanctuary Program** is a conservation and public policy program to heighten awareness about the natural resources of the bay and threats to its long-term protection through public outreach and ecosystem-based management initiatives.

## Michael S. Rice Memorial Library

The library houses the Center's collection of scientific journals and texts on marine biology, ecology and mammalogy, and marine geology. It also serves as an exhibit and meeting space.

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