WORLD'S LARGEST MARINE PROTECTED AREA CREATED IN PACIFIC OCEAN

New England Aquarium plays vital role

BOSTON. The small Pacific Island nation of Kiribati (pronounced Keer- i- boss) has become a global conservation leader by establishing the world's largest marine protected area – a California-sized ocean wilderness of pristine coral reefs and rich fish populations threatened by over-fishing and climate change. The New England Aquarium of Boston first suggested the idea of a marine protected area to the Kiribati government in the late 1990's and has helped guide the development of the Phoenix Islands Protected Area since 2000.

The Phoenix Islands Protected Area was recently doubled in size making it the largest marine protected area on Earth surpassing the Northwest Hawaiian Islands Marine Protected Area and Australia's Great Barrier Reef Protected Area. The concept of marine protected areas is new to the public, but they are the oceanic equivalent of national parks and national forests which have been highly valued by the American public for more than a century.

The Phoenix Islands Protected Area (PIPA) conserves one of the Earth's last intact oceanic coral archipelago ecosystems, consisting of eight coral atolls and two submerged reef systems in a nearly uninhabited region of abundant marine and bird life. The 410,500-square-kilometer (158,453-square-mile) protected area also includes underwater mountains and other deep-sea habitat.

Kiribati first declared the creation of PIPA at the 2006 Conference of the Parties to the Convention on Biological Diversity in Brazil. On Jan. 30, 2008, Kiribati adopted formal regulations for PIPA that more than doubled the original size to make it the largest marine protected area in the world.

Kiribati and the New England Aquarium (NEAq) developed PIPA over several years of joint scientific research, with funding and technical assistance from Conservation International's (CI) Global Conservation Fund and Pacific Islands Program. The CI support for PIPA is part of the Coral Reef Initiative in the South Pacific (CRISP).

"Kiribati has taken an inspirational step in increasing the size of PIPA well beyond the original eight atolls and globally important seabird, fish and coral reef communities," said Greg Stone, the NEAq vice-president of global marine programs. "The new boundary includes extensive seamount and deep sea habitat, tuna spawning grounds, and as yet unsurveyed submerged reef systems."

Located near the equator in the Central Pacific between Hawaii and Fiji, the Phoenix Islands form an archipelago several hundred miles long. They are part of the Republic of Kiribati, which comprises three distinct island groups (Gilbert Islands, Phoenix Islands and Line Islands) with a total of 33 islands to make it the largest atoll nation in the world.

"The creation of this amazing marine protected area by a small island nation in the Pacific represents a commitment of historic proportions; and all of this by a country that is under serious threat from sea-level rise

attributed to global warming.," said CI President Russell A. Mittermeier. "The Republic of Kiribati has now set a standard for other countries in the Pacific and elsewhere in the world. We are proud to be associated with this effort that helps the people of Kiribati, and we call on governments and private conservation groups everywhere to support Kiribati in its efforts and make similar commitments to protect their own natural systems."

The Phoenix Islands were featured in a major article in National Geographic in February 2004 (http://magma.nationalgeographic.com/ngm/0402/feature3/).

Three NEAq-led research expeditions since 2000 found great marine biodiversity, including more than 120 species of coral and 520 species of fish, some new to science. Some of the most important seabird nesting populations in the Pacific, as well as healthy fish populations and the presence of sea turtles and other species, demonstrated the pristine nature of the area and its importance as a migration route.

Protecting the Phoenix Islands means restricting commercial fishing in the area, resulting in a loss of revenue that the Kiribati government would normally receive from issuing foreign commercial fishing licenses. NEAq and CI are helping Kiribati design an endowment system that will cover the core recurring management costs of PIPA and compensate the government for the foregone commercial fishing license revenues. The plan allows for subsistence fishing by resident communities and other sustainable economic development in designated zones of the protected area.

Keeping oceans and marine ecosystems intact and healthy allows them to better resist the impacts of climate change and continue their natural role of sequestering atmospheric carbon that causes global warming.

Website: http://phoenixislands.org/

About the New England Aquarium

The New England Aquarium is one of the most prominent and popular aquariums in the United States. Its mission is to present, promote, and protect the world of water. Beyond its exhibit halls, the Aquarium is also a leading ocean conservation organization with research scientists working around the globe and biologists rescuing stranded marine animals in New England. www.neaq.org

About Conservation International

Conservation International (CI) applies innovations in science, economics, policy and community participation to protect the Earth's richest regions of plant and animal diversity and demonstrate that human societies can live harmoniously with nature. Founded in 1987, CI works in more than 40 countries on four continents to help people find economic alternatives without harming their natural environments. For more information about CI, visit www.conservation.org.

New England Aquarium

REBECCA NEWELL OF *THE BEEHIVE* IS THE FIRST CELEBRITY GUEST CHEF OF AQUARIUM'S SUSTAINABLE SEAFOOD DINNER SERIES

Fine dining experience combines ocean-friendly seafood options with guest chefs, expertly paired wine and cooking demonstrations

BOSTON. New Englanders love both seafood and the ocean but are often unsure about what they should or should not eat. The New England Aquarium's Celebrate Seafood Dinner Series will offer seafood choices that are good for both the palate and the ocean. This full evening combines the talents of some of Boston's best chefs with the Aquarium's experts on sustainable seafood for a unique fine dining experience and an introduction to making smart seafood choices.

Executive chef Rebecca Newell of Boston's hottest new restaurant and nightspot, The Beehive, headlines this year's first Celebrate Seafood Dinner on **February 5**. She will join Aquarium chefs George Kierstead and Tim Ridge in informative and fun cooking demonstrations before each of the three tastings. Rebecca will prepare a delectable, farm-raised rainbow trout. The menu will also feature wild-caught Dungeness crab and farm-raised hybrid striped bass. Each course is expertly paired with a fine wine and about what makes it a sustainable choice. Each guest will also receive a printed recipe booklet of the evening's dishes.

About Rebecca Newell and The Beehive

From her education at the New England Culinary Institute to her numerous travel experiences, Rebecca Newell uses her diverse background to create a fantastic dining experience for all who visit The Beehive. Located on the fashionable Tremont Street in downtown Boston, The Beehive's collage of eclectic, bohemian fare from Europe, the Mediterranean and America, combined with live jazz, burlesque and cabaret music almost every night, have made the restaurant, bar and performance venue one of the most popular nighttime destinations in Boston since opening in May 2007.

Dinner Series Details and Dates

The Celebrate Seafood Dinners will be held in the Aquarium's Harbor View Café, overlooking historic Boston Harbor. Five dinners are planned for 2008 with new celebrity chefs for each event. The dates are: **February 5, April 1, June 3, October 7** and **November 18**. Each dinner begins at 6:30 p.m. These unique dining experiences are a great gift for the foodie, aspiring chef or ocean lover in your life. Space is limited, and reservations are required. The price is $65 for New England Aquarium members and $75 for non-members. Call **(617) 973-5206** for reservations or visit www.neaq.org/celebrateseafood/ for more information.

Sustainable Seafood at the New England Aquarium

The Celebrate Seafood Dinner Series is one part of the New England Aquarium's effort to ensure that future generations will have plenty of fish in the sea. The Aquarium's Sustainable Fisheries Initiative educates the public about smart seafood choices through our dinner series and the Fish of the Month feature on the Aquarium's website. Beyond working with consumers, the Aquarium also provides conservation consulting services to some of the largest wholesalers of seafood in the world. Visit www.neaq.org/choicecatch.

TWO PROMINENT LOCAL INSTITUTIONS PARTNER TO IMPROVE SEAFOOD SUSTAINABILITY

Gorton's, Inc. engages the New England Aquarium to assess the sustainability of its seafood products

BOSTON. To enhance its current environmental efforts**,** Gorton's, Inc. has retained the New England Aquarium to conduct a sustainability assessment of the sources of its seafood products. The Gloucester, Massachusetts based company has hired the marine conservation consulting group of Boston's major aquarium to evaluate the environmental sustainability of species that Gorton's currently uses in its seafood products. Among the species to be assessed include pollock, salmon, tilapia, shrimp, haddock, sole and cod from both wild caught and farm-raised sources.

"Seafood is growing because it is an important part of a healthy diet. Gorton's recognizes that for future generations to enjoy the benefits of eating seafood, our products must be caught in an environmentally sustainable manner," said Dave Weber, VP of Environmental Affairs at Gorton's. "Our new relationship with the New England Aquarium will enhance our long-standing effort to better protect and manage the world's marine resources."

Lydia Bergen, a director of the Aquarium's sustainable fisheries program, emphasized the importance of Gorton's long term outlook, "Large wholesale buyers of seafood, like Gorton's, have a tremendous ability to affect positive environmental change in how our seafood is harvested and raised. The power of purchasing decisions in the marketplace should not be underestimated. It is in our best interest to ensure that we better care for the oceans, an increasingly important food source worldwide."

The initial study will identify potential environmental areas of risk as well as opportunities for improvement among Gorton's product sources. For wild species, New England Aquarium scientists will assess stock health, fishery management concerns, types of fishing gear used and what other species are unintentionally caught. For aquaculture-raised species, Aquarium staff will evaluate the full stream of environmental concerns and benefits. The study findings will help identify and recommend future sourcing options, public policy engagement and consumer education.

About Gorton's

Founded in 1849, Gorton's is one of America's oldest continuously operating companies. Headquartered in Gloucester, Massachusetts, Gorton's continues to be the innovative leader in the seafood industry. Gorton's full line of frozen seafood products includes breaded and battered Fish Stick and Fillets, Flavored Fillets, Tenders, Shrimp Bowls, Popcorn Shrimp, Premium Fillets and Shrimp Temptations, and Grilled Fillets, Salmon and Tilapia. Gorton's products are available nationwide in better independent and chain grocery stores. Gorton's proudly stands behind its products with its "Trust the Fisherman Guarantee," which represents an unwavering commitment for over 150 years to providing the best-tasting, quality seafood meals. For more information, please visit www.gortons.com or call 1-800-222-6846.

New England Aquarium

MOVING SHIPS AWAY FROM ENDANGERED WHALES HAS BECOME POPULAR TACTIC IN CANADA & U.S.

Canada Takes Another Step to Protect Right Whales from Ship Collisions

HALIFAX, NOVA SCOTIA & BOSTON. Ships and whales are both behemoths of the sea, but they often do collide, with usually tragic results for many endangered whale species. Wednesday, the Canadian government took its second step in four years to move ships away from the highest use areas of the North Atlantic right whale - its most critically endangered large whale species. Government officials announced that the Roseway Basin, an area about 30 nautical miles south of Cape Sable Island, Nova Scotia, has been designated a recommended "Area to be Avoided" for ships on a seasonal basis from June 1 to December 31. With an estimated population of only 400, right whales congregate in the Roseway Basin each year to feed and find mates.

This designation is the third time in four years that federal officials in either Canada or the U.S. have moved ships away from heavily used whale habitat areas. This past July, American officials relocated the shipping lanes that approach Boston and which also cross the Stellwagen Bank National Marine Sanctuary, America's only whale feeding sanctuary. That move within the sanctuary's boundaries not only better protects right whales but also endangered humpback and finback whales, which are observed by hundreds of thousands of whale watchers annually from Massachusetts ports.

This trend was begun in 2003 when Canadian officials moved the shipping lanes in the Bay of Fundy, located between Maine, New Brunswick and Nova Scotia. Known for its world record daily tides, the Bay of Fundy is also a major summer feeding site for right whales. That effort was spearheaded by an unlikely partnership between whale scientists from the Boston-based New England Aquarium and officials from Irving Oil, which had many ships traversing the area. Over several years, data was analyzed to accurately document the concentrations of whales, and a proposal was developed to move the shipping lanes without compromising the safety of the ships. What was particularly significant was the recognition on the part of both conservationists and shippers that no one wants to kill whales accidentally, but that some prudent measures needed to be taken.

Moira Brown, a senior right whale scientist with the New England Aquarium and the Canadian Whale Institute, was one the principals in developing and guiding the two Canadian shipping changes through a years-long process. She brought together parties who might be expected to be antagonistic with each other.

"This initiative shows that when Canadians from different sectors work together, we can make a real difference in protecting our wildlife and helping them to recover," said Loyola Hearn, Minister of Fisheries and Oceans Canada.

Brown stated, "For those concerned about the survival and recovery of the North Atlantic right whale, the Roseway Basin designation is great news. This science-based conservation initiative demonstrates that industry, biologists and government can successfully collaborate to help in the recovery of an endangered species by

reducing the potential for vessels and right whales to collide. The implementation of the "Area to be Avoided" measure is a major step forward in helping the right whale to recover."

That model was used in both Boston and for the new proposal in the Roseway Basin. All of the changes required the approval and adoption by the International Maritime Organization (IMO), the governing body that coordinates shipping routes around the globe. The IMO just adopted Canada's proposal at its 83rd session in Copenhagen, Denmark which is still underway until October 12.

How far will this trend reach is an open question. Just over the past month, three blue whales were apparently killed by ship traffic in southern California waters where they gather to feed during the summer months. Conservation organizations have requested emergency speed restrictions there. Proposed new rules from the U.S.'s National Marine Fisheries Service to slow down ships in active right whale habitats along the East Coast have been stalled in a review from the Office of Management and Budget. Still, this latest move by Canada serves to remind us that practical, cooperative solutions can be implemented with the support of the shipping industry to protect America's coastal whales.

New England Aquarium

KILLER INSTINCTS REVEALS THE TRUTH ABOUT WHAT WE THINK ARE THE SCARIEST ANIMALS IN THE SEA

Aquarium's new theme program opens Oct. 5

BOSTON. What we don't understand, we often fear, and many of the ocean's most mysterious creatures bear the brunt of our mischaracterizations. We think of them as vicious, violent and deadly. The mere mention of a shark can clear a crowded beach in minutes. After wildlife expert Steve Irwin's death, stingrays became infamous for the dangerous stinger in their tails.

The most terrifying animals in the ocean have been inspiration for countless horror movies, books and urban legends. But how dangerous are they really? The truth may surprise you. Which marine animals should we fear, and which ones are we driving to extinction? Which animals do we think of as cold-blooded killers when they are only acting in self-defense? And what small fish is one of the deadliest creatures in the ocean?

All of these questions and more are answered in the New England Aquarium's newest theme program, *Killer Instincts*, which opens October 5. The program's interactive passport program gives visitors a lasting take-home memory as they stamp their passports to learn the truth behind the sand tiger shark, anaconda, great barracuda, electric eel, lionfish, moray eel, giant Pacific octopus and southern stingray. Additionally, Live Animal Presentations throughout the day will introduce visitors to other feared creatures. Educators will be on hand to answer every imaginable question and help the terrified face their fears. A larger-than-life shark video on our high-definition wall brings visitors face-to-face with these incredible creatures. Our newest offering at the Simons IMAX Theatre, *Sea Monsters: A Prehistoric Adventure*, rounds out the program through a startlingly realistic 3D movie that tells the story of the most terrifying animals ever to roam the sea: the ferocious underwater dinosaurs of the Cretaceous period.

Shark attacks on humans are incredibly rare. More people are killed by dogs, crocodiles, elephants and pigs each year than by sharks. People are actually a far bigger threat to sharks than they are to us. Millions of these threatened species are killed each year for their fins, skin and meat, and as by-products of the fishing industry.

Despite the tragedy surrounding Steve Irwin's death, incidences in which stingrays harm humans are similarly rare. Stingrays only use the poisonous stingers at the base of their tails when they feel threatened, as a self-defense mechanism against predators. In fact, most stingrays are so gentle that entire tourism industries in some areas have been created around allowing divers to touch and interact with these creatures in the wild.

This doesn't mean, of course, that you should hop into the water to swim with the sharks, or seek out a stingray when it's feeling threatened. Some ocean creatures can be dangerous—some of the most unexpected ones can even be deadly. Visiting the New England Aquarium will help you uncover the truth of their *Killer Instincts*.

New England Aquarium

TWO OF THE WORLD'S MOST ENDANGERED WHALES ENTANGLED OFF THE GEORGIA/FLORIDA COAST

BOSTON. Early this week, whale researchers from the New England Aquarium were flying over the coastal waters of Florida and Georgia in the hopes of spotting newborn right whale calves when they discovered two of these endangered whales suffering from entanglements in marine gear. North Atlantic right whales are the most endangered large whales in the Atlantic with less than 400 animals still alive.

One of the whales might be near death as it shows evidence of some of the most severe trauma from entanglement ever seen on any large whale. Aerial pictures show white-colored cuts up to 24 inches wide that wrap around the whale's body multiple times. Amy Knowlton a senior scientist with the New England Aquarium noted, "When I saw the image of this whale, I was horrified at the severity of the injuries. This whale clearly struggled hard to get free of this gear. But I fear it is still suffering from these massive wounds and its survival is questionable."

A second young whale was also seen on the same day with a long rope trailing more than 60 feet from both sides of its mouth. It also had extensive lacerations on its tail. This entanglement although not immediately life threatening is still significant. This unnamed, juvenile male was born in these same waters in 2003 and is listed in the New England Aquarium Right Whale Catalog (www.neaq.org/rwcatalog/) as #3333. He was last seen in August with no gear in Canada's Bay of Fundy.

Whale scientists and government officials have been planning their response. The Provincetown Center for Coastal Studies (www.coastalstudies.org/), which manages the Large Whale Disentanglemnt Network and specializes in removing gear from whales, has drafted an action plan to be implemented at the next sighting. Bad weather along the Southeast coast has kept spotter planes grounded late this week. The first step will be to relocate the entangled whales and to attach a tracking buoy to the rope of the whale with the mouth entanglement. With good weather and a known location, a disentanglement team may attempt to reduce the length of the line trailing from the whale's mouth or free it entirely.

It is unclear if anything can be done for the severely injured whale. Named Ruffian, this 40-45 ton, young male was seen free of gear in December in the Gulf of Maine. Scientists can not tell whether there is still marine line embedded deep in its flesh. The trauma to the whale's flesh is so deep that it threatens to pass through the 8 to 12 inches of blubber and enter the body cavity of the whale. Whales with this severe of an injury typically succumb to the debilitating effects of systemic infections over a period of weeks to months.

Knowlton, who has also served on government advisory panels to reduce large whale mortality from human activities said, "A sighting like this should leave no question in anyone's mind that entanglement in fishing gear remains a serious problem for large whales. Addressing this issue remains paramount. Some positive changes are slowly being made but much more hard work remains to be done to make the ocean safer for right whales."

In January 2007, Massachusetts lobstermen switched to sinking line between lobster traps to reduce the likelihood of large whales becoming entangled in the long arcs of rope that floated off of the bottom. Similar

federal regulations that are scheduled for October 2008 in Maine's giant lobster industry has met fierce political opposition. In early 2006, gill netting was prohibited from the waters around the right whale calving grounds after a new born calf drowned in the fixed fishing gear. Over the past two decades, six right whales are known to have died of gear entanglements while twelve more right whales are presumed to have died of their documented life-threatening entanglements as they were never seen again.

Right whales are often called America's urban whale as their principal habitats are spread out along the shallow and highly congested coastal waters of eastern North America. Protected internationally since 1936, the right whale population has failed to recover unlike many other whale species. The slow moving, surface feeding whales have suffered from a low birth rate and regular deaths from vessel strikes and entanglement in all kinds of marine gear. Right whales spend much of the year in New England and nearby Canadian waters. Pregnant females and many other juvenile animals migrate down the East Coast late each autumn to give birth off the coasts of southern Georgia and northern Florida. They will remain there until the late winter when they begin their hazardous migration back up the East Coast.

New England Aquarium scientists have been studying right whales for 28 years in one of the longest running continuous wildlife studies in the world.

Located on the Boston waterfront, the New England Aquarium is one of the most prominent and popular aquariums in the United States. Its mission is to present, promote, and protect the world of water. Beyond its exhibit halls, the Aquarium is also a leading ocean conservation organization with research scientists working around the globe and biologists rescuing stranded marine animals in New England.

New England Aquarium

SEA TURTLES FLY SOUTH FOR THE WINTER

Private pilot to fly seven rescued sea turtles to Georgia for rehab and release

WHAT: Seven of the world's most endangered sea turtles rescued from Cape Cod Bay in November and nursed back to health at the New England Aquarium in Boston will be flown on a private jet from Norwood, Massachusetts to St. Simon's Island, Georgia for rehabilitation and eventual release. It sure beats swimming or the lines at Logan!

Thanks to the charitable spirit of a private pilot from Baltimore, these critically endangered sea turtles will be flown to the Georgia Sea Turtle Hospital on Jekyll Island to begin the final leg of their recovery journey. First found on beaches on the north side of Cape Cod with body temperatures as low as 45 degrees Fahrenheit, these juvenile turtles were rescued by staff and volunteers of the Massachusetts Audubon Sanctuary at Wellfleet Bay. The cold-stunned turtles were then brought to the New England Aquarium in Boston for slow re-warming and weeks of veterinary care that included treatment for hypothermia, pneumonia, and severe dehydration. Once in Georgia, the turtles will begin a final rehabilitation phase and will eventually be released back into the Atlantic.

Five of the seven sea turtles flying to Georgia are of the Kemp-Ridley species. Biologists estimate that there are only a few thousand nesting Kemp-Ridley females left in the world. Over the past decade, this sea turtle rescue network led by the New England Aquarium, has treated and released several hundred of these critically endangered sea turtles.

WHO: Mike Mulligan, a Baltimore area resident, will fly his small jet into Norwood Airport. Mulligan will fly the seven endangered sea turtles non-stop to southern Georgia to a turtle rehabilitation hospital there. Also on hand and will be Connie Merigo head of the Aquarium's Marine Animal Rescue Team.

The seven endangered sea turtles including Tinkerbell (the smallest) and Scooby Doo. This year, Aquarium rescue biologists named their turtle patients after cartoon characters.