

# SANCTUARY WATCH

**Inside...**

*How (Not)  
to Rescue  
a Whale*

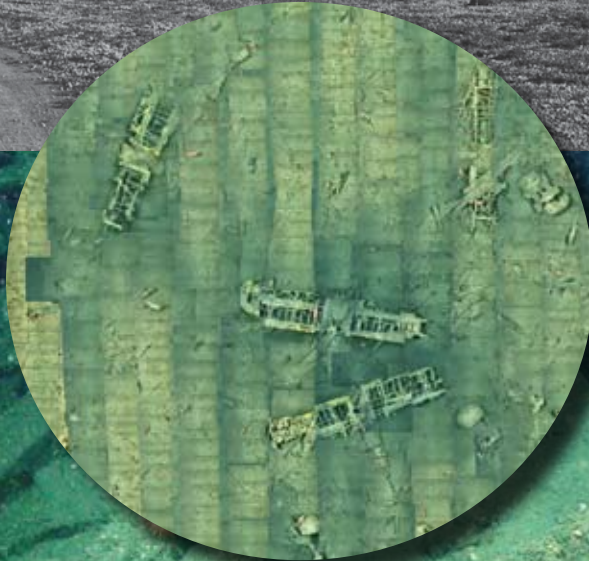
*Thank You,  
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*Researchers  
Find Rare  
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*Critter Files:  
Great Auk  
and Northern  
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*Helping the  
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the Sea:  
Clive Cussler*



NATIONAL MARINE  
SANCTUARIES



**Return to the Macon**  
*Revisiting the Final Resting Place  
of America's Last Great Airship*



Photo: Jim West



# Letter from the Director

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**Sanctuary Watch** is a publication of the Communications Branch of the National Oceanic and Atmospheric Administration (NOAA) National Marine Sanctuary Program. NOAA is an agency of the U.S. Department of Commerce.

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**Cover:** (Top) The USS *Macon* at its mooring mast. U.S. Navy photo courtesy Monterey History and Art Association. (Inset) Remains of a F9C-2 Sparrowhawk. Photo: NOAA/MBARI. (Bottom) Photomosaic of the *Macon* wreck site. Photo: NOAA/MBARI

If you watched television in the 1980s, you may recall a car commercial whose tag line was, “It’s not your father’s Oldsmobile.” The message was, take a look at our product now, because it’s better and more exciting than ever. While our business is marine resource protection instead of automobile manufacturing, the same is true of the NOAA National Marine Sanctuary Program.

Through hard work, determination and the support of people like you, we have more to offer the nation and our ocean planet than ever before. Now 35-years-mature, the sanctuary program is dynamic, capable, results-oriented and, in the words of the National Academy of Public Administration, “ready to perform.”

In the program’s early days, our assets were limited to a few small vessels with limited capabilities and a handful of field offices. The few sanctuaries that had been designated were not well known to the public, nor were their resources well understood. Some viewed sanctuaries as little more than notations on nautical charts—places where not much happened in terms of real scientific research and conservation.

But as you will see from this issue of *Sanctuary Watch*, we have come a long way since the first national marine sanctuary was designated in 1975.

We now manage 13 national marine sanctuaries and a marine national monument—the world’s largest marine conservation area—that together encompass more than 150,000 square miles of ocean and Great Lakes waters. We are working with the nation’s top research institutions to uncover the secrets of the deep with cutting edge technology. We are applying the best available scientific information in our management decisions, and sharing with our partners, both here and abroad, what we have learned. We have a growing fleet of state-of-the-art vessels to facilitate research, conservation, management, education and enforcement. Citizens are engaged in sanctuary management through our community-based advisory councils and other public input processes. People from all walks of life are learning about sanctuaries through our visitor centers, robust education and outreach efforts, and Web sites. The once unfamiliar term “national marine sanctuary” is now synonymous with “special area of the marine environment.”

This list of accomplishments goes on. That’s why we invite you to look at us now—to kick the tires and take the sanctuary program out for a test drive. We think you will like what you see. And, finally, we hope you will invest in our product. We think it’s a winner.

Sincerely,

Daniel J. Basta, Director  
NOAA National Marine Sanctuary Program

**Learn more about your national marine sanctuaries at [sanctuaries.noaa.gov](http://sanctuaries.noaa.gov)**



NOAA sanctuary program marine archaeologist Hans Van Tilburg examines the wreck of the *Dunnottar Castle* in the Northwestern Hawaiian Islands Marine National Monument. Photo: Robert Schwemmer/NOAA

## Shipwreck Discovered During Expedition to Marine National Monument

NOAA marine archaeologists have confirmed the identity of a shipwreck discovered in July 2006 in the waters of the recently designated Northwestern Hawaiian Islands (NWHI) Marine National Monument. The team has identified the wreck, found at Kure Atoll, as that of the 258-foot iron hulled cargo ship *Dunnottar Castle*. The discovery was made during the first research expedition to the NWHI since it was designated a marine national monument by President Bush. NOAA marine archaeologists working from the NOAA Ship *Hi'ialakai* confirmed the wreck's identity following its initial discovery by a volunteer with the state of Hawaii Division of Forestry and Wildlife. Built in 1874 and home ported in Scotland, the *Dunnottar Castle* was bound from Sydney, Australia, to Wilmington, Calif., with a load of coal when it struck a reef at full speed. For more about the discovery, visit [sanctuaries.noaa.gov](http://sanctuaries.noaa.gov).

## Report Applauds National Marine Sanctuary Program Progress

A new report by the National Academy of Public Administration commends the NOAA National Marine Sanctuary Program for progress it has made in developing sound planning systems and performance measures over the last three years. The report, *Ready to Perform? Planning and Management at the National Marine Sanctuary Program*, offers an assessment of the sanctuary program's planning, budgeting and performance-

based management, and includes recommendations based on the academy's observations. The report states that national marine sanctuaries are "excellent places for testing new approaches to marine governance that promise better performance than the current system." The report is available at [sanctuaries.noaa.gov](http://sanctuaries.noaa.gov).

## 'Green' NOAA Maritime Heritage Center Wins Award

NOAA's Great Lakes Maritime Heritage Center, the new headquarters for Thunder Bay National Marine Sanctuary, was recently awarded the Dept. of Energy's *You Have the Power* award for energy conservation. The 20,000-square-foot building, which opened in Alpena, Mich., in September 2005, received the award for its energy-efficient design that includes a geothermal heating and ventilation system and other conservation-minded features that allow the building to consume 35 percent less energy and 48 percent less water than a typical building. The maritime heritage center is currently on track to become a Gold Certified Leadership in Environmental and Energy Design facility by the U.S. Green Building Council.

## Divers Remove 'Ghost Gear' from Sanctuary Shipwreck

A team of specially trained divers removed derelict, or "ghost," fishing gear from a shipwreck in Stellwagen Bank National Marine Sanctuary in September 2006 to make the site safer for divers, wildlife and robotic submersibles used for exploration and research. The divers targeted a trawl net on the wreck of the coal schooner *Paul Palmer*, located near Provincetown, Mass. By removing the net, the team reduced entanglement threats and increased the aesthetic value of this historic site. Divers from the NOAA National Marine Sanctuary Program, NOAA Fisheries, NOAA Office of Marine and Aviation Operations, and the University of Connecticut were part of the team



that deployed off the new NOAA National Marine Sanctuary Program Research Vessel *Auk*, based at Stellwagen Bank National Marine Sanctuary headquarters in Scituate, Mass.

A team of divers removed this "ghost" net from the wreck of the historic schooner *Paul Palmer* in Stellwagen Bank National Marine Sanctuary. Photo: NOAA/SBNMS

(Cont'd on pg. 9)

# RETURN TO THE *MACON*



U.S. Navy photo of the USS *Macon* and crew. Courtesy Monterey History and Art Association. Below: The official squadron patch of the USS *Macon*. Photo: NOAA

## Researchers Revisit a Sunken Relic of Aviation's Golden Age

A team of NOAA National Marine Sanctuary Program researchers returned to an iconic piece of the U.S. Navy's aviation history in September 2006, when they mounted a five-day expedition to explore the wreck of USS *Macon*, the Navy's last dirigible, now resting in 1,500 feet of water in Monterey Bay National Marine Sanctuary.

Working with the Monterey Bay Aquarium Research Institute (MBARI), Stanford University, the U.S. Naval Historical Center, the U.S. Naval Airship Association, California State Parks, the Monterey Maritime and History Museum and Moffett Field Historical Society, sanctuary program researchers aboard the institute's R/V *Western Flyer* conducted more than 40 hours of deepwater surveys using the ship's remotely operated vehicle (ROV) *Tiburon*.

"The *Macon* is a time capsule of a bygone era and provides an important opportunity to study the relatively undisturbed archaeological remains of a unique period in aviation history," says Bruce Terrell, sanctuary program senior maritime archaeologist.

Scientists used the high-definition cameras mounted on the *Tiburon* to take numerous digital photographs of the *Macon's* wreckage, which includes the remains of four Curtiss

F9C-2 Sparrowhawk biplanes once carried aboard

the airship. Among the artifacts located by the expedition were five of the *Macon's* eight gasoline engines, sections of the aluminum stove from the galley, and the nose-mounted mooring assembly that sailors clung to before the airship disappeared beneath the waves.

Chris Grech, MBARI's deputy director for marine operations and co-principal investigator for the expedition, said he was delighted with the opportunity to explore the area more thoroughly. Grech, who participated in the 1990 expedition that discovered the *Macon*, says returning to the wreck site "was like visiting an old friend that you haven't seen in years."

"We are extremely pleased with the survey results, the performance of the offshore equipment and operations team and the collaboration with NOAA and the National Marine Sanctuary Program," says Grech.



The images collected by the *Tiburon's* cameras will be used to create a photomosaic of the wreck site, which will help federal and state agencies including the U.S. Navy, who still owns the wreck, monitor the condition of the wreck over time, said Robert Schwemmer, West Coast regional maritime heritage coordinator for the National Marine Sanctuary Program and co-principal investigator for the expedition.

“The expedition to the *Macon* fulfilled all of our key responsibilities under our maritime heritage program, and that is to explore, characterize, and protect submerged heritage resources and to share our discoveries with the public,” says Schwemmer. “With the information we have gathered, and the photomosaic created, students and historians will benefit from the documentation and management of this unique ‘flying aircraft carrier.’”

Just two years after its launch in 1933, the 785-foot *Macon* was lost in a storm off Big Sur. Its location remained a mystery for nearly half a century until a fisherman found a piece of the wreck in his net in 1979. In 1990, MBARI and the U.S. Navy launched an expedition to locate and document the *Macon*. NOAA conducted a side-scan sonar survey in 2005 aboard the NOAA R/V *McArthur II* in preparation for the 2006 expedition.

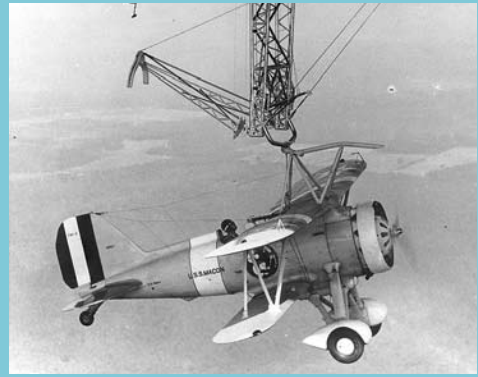
Students and the general public were able to follow the expedition through daily Web logs and live video feeds from the ROV. In addition, Noah Doughty, an educator from Mission College Preparatory High School in San Luis Obispo, Calif., participated in the expedition as a NOAA “Teacher at Sea,” assisting the crew and gathering information to create high school curriculum.

Grant funding for the expedition and outreach was provided by NOAA’s Office of Ocean Exploration, NOAA National Marine Sanctuary Program, NOAA Preserve America Initiative and MBARI.

For more information on the *Macon*, please visit [sanctuaries.noaa.gov](http://sanctuaries.noaa.gov).



The USS *Macon* over Manhattan. Photo: U.S. Navy



F9C-2 Sparrowhawk. Photo: Naval Historical Center

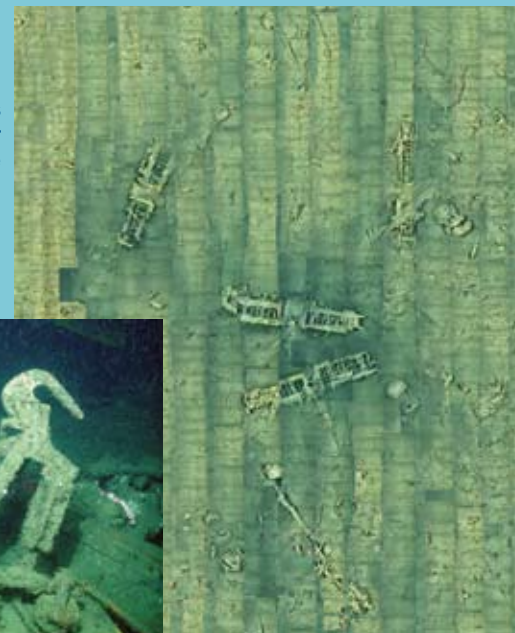
## Men on the Flying Trapeze

The USS *Macon* was so massive that it carried its own protection: five Curtiss F9C-2 Sparrowhawk fighter planes, which were stored in the aircraft’s belly.

The biplanes were released via a trapeze and a harness that lowered the planes through a T-shaped hole in the *Macon's* underside.

Retrieving the planes, however, was a much more difficult process. The pilots had to match their speed to that of the airship and “catch” the trapeze with a hook at the top of the plane. The harness would then attach to the fuselage, and the aircraft would be raised. These daring pilots became known as the “Men on the Flying Trapeze.” Despite the difficulty of the maneuver, they had a flawless record on the *Macon* and her sister ship, the *Akron*.

NOAA and MBARI researchers imaged the remains of four Sparrowhawks during the 2006 expedition. Photos: NOAA/MBARI



# F

## reeing Entangled Whales: A Task Best Left to the Experts

What started out as a routine day of fishing for a well-intentioned New Zealand man quickly turned to tragedy when he attempted to save an entangled humpback whale off New Zealand’s coast. As reported in a June 2003 issue of the *New Zealand Herald*, Tom Smith arrived on the scene after picking up reports from local fishermen of a whale in trouble. He leapt into the water and tried to cut the roped whale free. Inadvertently, the whale’s fluke came down on Smith, killing him.

For Ed Lyman, a whale rescue expert with Hawaiian Islands Humpback Whale National Marine Sanctuary the New Zealand tragedy is precisely what he wants people to avoid. “Smith’s enthusiasm to do something good ended badly,” Lyman says.

The first thing Lyman and other marine mammal rescue specialists tell people is don’t get into the water. “The desire for untrained people to act on their own can often have dangerous results,” he says. “Would-be rescuers can injure themselves and also injure a whale by using improper equipment or techniques.”

Dr. Terri Rowles, director of the NOAA Fisheries Marine Mammal Health and Stranding Response Program, the federal agency that authorizes and oversees all marine mammal rescues in the U.S., concurs with Lyman. “For both the animals’ welfare, as well as human safety, it is important that only specially permitted and trained people working under the authority of the NOAA stranding and response program cut gear and marine debris from a whale.”



A specially trained rescue team from Hawaiian Islands Humpback Whale National Marine Sanctuary cuts free an entangled humpback. Photo: HIHWNMS under MMHSRP permit # 932-1489



Fortunately, the sanctuaries rescue team was able to free this entangle whale of all gear. Photo: HIHWNMS under MMHSRP permit # 932-1489

Rowles emphasized that “the public should never attempt to disentangle a marine mammal, whether from a vessel or in the water, because the activity is inherently dangerous to both the animals and the people trying to save them.”

Marine mammals getting caught in fishing gear and debris is a growing problem for state and federal agencies, along with private groups dedicated to protecting these animals. Each year, thousands of whales and dolphins die from the gear, indicating that fisheries by-catch is a significant human-related cause of cetacean mortality.

David Mattila, the research and rescue coordinator for the Hawaiian Islands Humpback Whale sanctuary, has spent the last 25 years cutting large whales free. He stressed the importance of leaving the rescue work to the specialists by highlighting some of the high-tech equipment available to them.

“One of the pieces of equipment that we use to help us free these animals is transmitters,” Mattila says. “Attaching transmitters to the gear ensnaring the whale allows the rescue team the ability to track the animal until proper resources and trained personnel have been assembled, and conditions are favorable to safely cut the whale free.”

In Alaska, the sanctuary program and NOAA Fisheries’ local Protected Resources Division tagged a humpback entangled in gillnet. The transmitter allowed the team to work on the animal on two different occasions, and free it nine days later. This was the first time transmitters were used to aid in whale disentanglement efforts in Alaska.

Extensive effort has also gone into developing and testing unique and specialized cutting tools that can help remove the gear safely and without causing additional harm to the whales.

During the past 30 years, more than 1,000 whales have been freed of gear using boat-based techniques that have been proven productive and safe. To date no major injuries have occurred.

Anyone who sees an entangled whale or other marine mammal should call the local NOAA Fisheries Regional Office, Marine Mammal Stranding Network, or the U.S. Coast Guard.

For more information, visit [www.nmfs.noaa.gov/pr/health](http://www.nmfs.noaa.gov/pr/health).

## What to Do if You Spot an Entangled Whale

Ocean users have formed a warm bond with whales and when we see one in trouble it is natural want to help the animal. But the desire to do something good can often lead to disaster.

### A few key reminders:

- Do not get into the water under any circumstances to try and save an entangled whale.
- NOAA Fisheries does not authorize anyone to rescue entangled whales unless they are specially trained and permitted under NOAA Fisheries' Marine Mammal Health and Stranding Response Program.
- Call the U.S. Coast Guard or the local marine mammal stranding network for assistance.



## Thank You, Ocean!

"The ocean takes care of us. Let's return the favor." That's the message of a new California-wide ocean awareness campaign launched in September 2006 by the NOAA National Marine Sanctuary Program and the State of California Research Agency. Developed with input



from the California Ocean Communicators Alliance, a grassroots network of 200 representatives from ocean-related business, agencies and organizations who research millions of Californians, the campaign is designed to spur citizen involvement in ocean protection. Campaign ads and film messages highlight the connection between humans and the ocean, and direct the public to the [www.thankyouocean.org](http://www.thankyouocean.org) Web site to learn five things everyone can do to thank the ocean.

## New Sanctuary Program Vessels Dedicated

The NOAA National Marine Sanctuary Program dedicated two new research vessels in fall 2006 that greatly enhance the program's on-the water research, enforcement and education capabilities. The 50-foot R/V *Auk* supports Stellwagen Bank National Marine Sanctuary, located off the Massachusetts coast. The 67-foot R/V *Fulmar* serves California's Monterey Bay, Cordell Bank and Gulf of the Farallones national marine sanctuaries. "The dedication of these state-of-the-art research vessels fulfills our commitment to support scientific research, data collection and real-time monitoring that will lead to better ecosystem-based management of our marine sanctuaries," said Daniel J. Basta, director of the NOAA National Marine Sanctuary Program. The vessels were built by All American Marine in Bellingham, Wash.



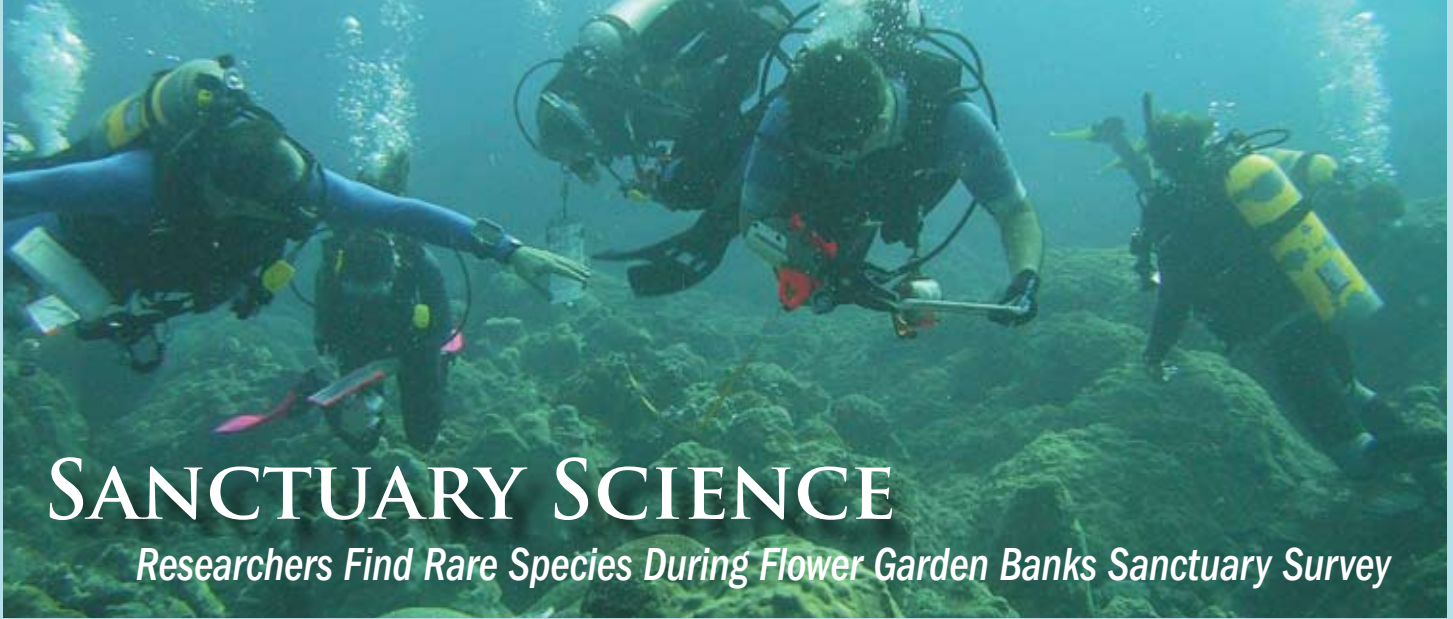
## The Oceans Get Help from the Little Mermaid

The National Marine Sanctuary Foundation, NOAA, the Ad Council, Walt Disney Corporation and Environmental Defense have launched a national multimedia public service

campaign focused on keeping our oceans clean and free of marine debris. Using the Little Mermaid and other iconic Disney characters in the film, the partners created TV, radio, print and outdoor ads to help focus attention on the need to properly dispose of trash that often ends up in the ocean as marine debris. The campaign communicates to audiences that, regardless of where you live, "life in the oceans depends on you," and encourages ocean lovers everywhere to dispose of trash properly. To learn more, visit [www.keeпоceansclean.org](http://www.keeпоceansclean.org).



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# SANCTUARY SCIENCE

## Researchers Find Rare Species During Flower Garden Banks Sanctuary Survey

NOAA scientists record the abundance of marine life during a biogeographic assessment of Flower Garden Banks National Marine Sanctuary. Photo: NOAA/FGNMS

Scientists from the NOAA National Centers for Coastal Ocean Science teamed up with the staff of Flower Garden Banks National Marine Sanctuary Sept. 26 to Oct. 2, 2006, to kick off an ambitious new study in the sanctuary's thriving, species-rich waters, making a number of surprising discoveries in the process.

The researchers traveled to the marine sanctuary, located more than 100 miles south of the Texas-Louisiana border in the warm waters of the Gulf of Mexico, aboard the NOAA Ship *Nancy Foster* to conduct the first part of a comprehensive biogeographic assessment — an extensive survey that will catalog the abundance and distribution of the area's fish, coral and other invertebrate species.

Data gathered from the study will give scientists a clearer picture of the habitats preferred by the sanctuary's diverse array of marine residents, making it possible for marine resource managers to identify areas that may be particularly important to the health of the sanctuary ecosystem.

During the first portion of the project, NOAA scientists surveyed more than 70 locations ranging from about 55 to 110 feet in depth representing a variety of habitats. Among the highlights of the expedition was the first documented sighting of a Nassau grouper and rare sightings of Goliath grouper - the largest member of the sea bass family in the Atlantic - within the waters of the sanctuary. Both species have undergone dramatic declines in abundance throughout their ranges and are now considered "species of concern" by the NOAA Fisheries Service. In addition, divers frequently sighted marbled grouper, a species that is rarely found anywhere else in the Gulf of Mexico or the Caribbean.

Researchers also observed large numbers of juvenile fish in certain deepwater patches of dense, finger-like coral, suggesting that those areas may provide shelter for young fish and act as "nurseries" similar to the seagrass or mangrove habitats that are crucial to the survival of many species elsewhere. If the results of the project reveal this to be true, it will allow local resource managers to determine how best to protect this important fish habitat and help ensure the continued health of this reef ecosystem.

Designated in 1992, Flower Garden Banks National Marine Sanctuary protects the northernmost coral reefs in the United States, in an area teeming with an estimated 250 species of fish, 23 species of coral and 80 species of algae, as well as large communities of sponges. The sanctuary is also one of the last remaining regions within the western Atlantic that is home to high densities of large predatory fish such as groupers, snappers and sharks, and boasts unparalleled coverage of reef-building corals.



Several horse-eye jacks swim past Flower Garden Banks National Marine Sanctuary GIS Specialist Doug Weaver as he dives to assist with species counts for a biogeographic assessment study. Photo: NOAA/FGNMS

Data collected from the biogeographic assessment will complement the findings of previous research and will be instrumental in the ongoing efforts of sanctuary personnel to revise the sanctuary's management plan — a document that will serve as a framework for guiding future management and activities of the sanctuary.

To learn more about the Flower Garden Banks sanctuary study, visit [sanctuaries.noaa.gov](http://sanctuaries.noaa.gov).





## Critter Files: Great Auk and Northern Fulmar



Illustration courtesy Richard Wheeler

**Common Name:** Great Auk

**Scientific Name:** *Pinguinus impennis*

**Max Size/Length:** 30-34 inches tall (70 cm) and weighed about 5 kg (11 lbs)

**Max Lifespan:** Unknown

**Distribution:** North Atlantic. Before its extinction, the Great Auk was found in great numbers on islands off eastern Canada, Greenland, Iceland, Norway, Ireland and Great Britain.

**Diet:** Small fish and plankton.

**Status:** Extinct

In fall 2006, the NOAA National Marine Sanctuary Program dedicated two new research vessels to support sanctuaries in New England and California. Both vessels were named for seabirds important to the regions the vessels serve.

The R/V *Auk*, which serves Stellwagen Bank National Marine Sanctuary, was named in honor of the great auk, an extinct, penguin-like seabird that once wintered in the waters of New England, where the sanctuary is located.

"In recognizing the auk, we are reminding ourselves of the impact humans can have in our marine ecosystems, and that our work today may help prevent some of the types of tragedies that have happened in the past," says Stellwagen Bank Sanctuary Superintendent Craig MacDonald, Ph.D.

The R/V *Fulmar*, which operates off the California coast, was named for the northern fulmar, a medium-sized, long-lived seabird known for being a strong flier.



Photo: © Brian L. Sullivan

**Common Name:** Northern Fulmar

**Scientific Name:** *Fulmarus glacialis*

**Max Size/Length:** 17-20 inches (43-52 cm) long with a wingspan of 39-46 inches (101-117 cm)

**Max Lifespan:** 40+ years

**Distribution:** California to Alaska and Canadian Arctic

**Diet:** Fish, squid and shrimp

**Status:** Stable in U.S. waters

# The NOAA Sanctuary Program Lends a Hand to the Galapagos



The NOAA National Marine Sanctuary Program teamed with the Galapagos National Park to install a mooring buoy and line. Photo: John Halas/FKNMS

In July 2006, experts from the NOAA National Marine Sanctuary Program traveled to one of the world’s last great marine conservation areas - the Galapagos Islands. Their job: to help staff from the Galapagos National Park and Marine Reserve install mooring buoys in tourist sites to alleviate damage caused by vessel anchoring.

Acting on a request from the U.S. Agency for International Development (USAID)/Ecuador and the Galapagos park and reserve, the sanctuary program trained Ecuadorian locals on how to place the buoys and leave them with the skills to continue installing them throughout the Galapagos Islands.

“NOAA recognizes the connectivity of the world’s oceans and the importance of working internationally to sustain and conserve ocean resources,” according to Brady Phillips of the sanctuary program, who coordinated the mooring buoy installation project. “And in supporting NOAA’s mission, the National Marine Sanctuary Program believes our own experience in working with local communities and stakeholders to resolve complex resource management issues can be shared and tailored to fit specific needs in the Galapagos.”



Galapagos National Park trainees receive topside instruction from sanctuary staff on the operation and maintenance of the tools used for installing the anchor program system. Photo: John Halas/FKNMS

The islands are home to some of the world’s most unique and rare species. The marine iguana, giant tortoise, flightless cormorant and the only penguin species inhabiting tropical waters are examples of animals found nowhere else.

Additionally, the archipelago’s rich waters are home to more than 300 species of fish, the green pacific sea turtle and numerous sea lions and dolphins. But like all sensitive marine ecosystems, the Galapagos can fall prey to human disturbances.

Installing mooring buoys is a move in the right direction to protect the region’s seafloor from anchoring, which can disturb, and in many cases, destroy key invertebrate communities and soft coral that form a necessary component of the islands marine environment.

The key in this effort - the first of its kind for the Galapagos Islands - is the embedment anchor mooring buoy system, developed by John Halas, manager of the Florida Keys National Marine Sanctuary upper region office.

“Conventional mooring buoys use heavy cement blocks situated on the sea floor with chain and a floating buoy,” says Halas. “The block and chain are subject to heavy drag causing damage to corals. Our buoys, first used in the Florida sanctuary’s waters, involves drilling a hole into hard limestone or dead coral and cementing a stainless steel eye into the core. This system is firm and drag-free. From the eye, a line is floated to the surface to the buoy.”

Rocio Cedeno of USAID/Ecuador notes, “Placing the buoys in the Galapagos Marine Reserve tourist sites was a real need. Tourist boats anchoring in our waters were damaging the seafloor. Visitors and the diving guides were often requesting a useful mooring system.”

A year before the buoy trip, sanctuary program staff visited the islands and began a partnership to look at ways to strengthen the islands’ ability to address ecosystem management challenges, and help the Galapagos meet their long-term goals and objectives for the marine reserve.

The sanctuary program also has partnerships with Australia, Italy and South Korea to share knowledge about managing protected areas in the ocean.

The Galapagos project was funded by the National Marine Sanctuary Foundation.




A Galapagos National Park trainee prepares to secure a mooring buoy anchor eye to the bottom. Photo: Amy Massey

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## Gray's Reef Sanctuary Celebrates 25 Years of Stewardship

On Sept. 7, 2006, the National Marine Sanctuary Foundation During hosted a special event

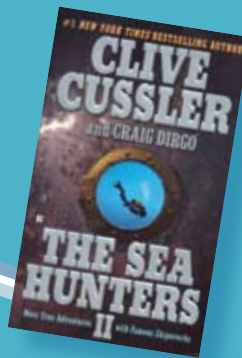


at the Georgia Aquarium in Atlanta, Ga., celebrating the 25th anniversary of Gray's Reef National Marine Sanctuary. During the event, the foundation honored The Home Depot co-founder Bernie Marcus (middle) for creating the Georgia Aquarium and being a long-time supporter of ocean protection. World renowned marine biologist and foundation trustee Dr. Sylvia Earle (right) presented the award to Marcus, pictured here with his wife Billi. Photo courtesy Edward M. Pio Roda Photography. 



## Star of the Sea

Clive Cussler



When the NOAA National Marine Sanctuary Program and The Mariners' Museum were looking for someone to deliver the keynote address at the christening of a full-scale replica of the Civil War ironclad USS *Monitor* and to cut the ribbon on NOAA's Maritime Archaeology Center, the choice was obvious: Clive Cussler.

While Cussler was not involved in the *Monitor's* discovery, few people have done more to raise awareness of our nation's maritime heritage than this shipwreck hunter and best-selling author.

"As a boy growing up in Southern California I've always loved shipwrecks," says Cussler. "Actually, addicted is a better word. Still am. I'm addicted to the hunt. And to be able to share with people those treasures found gives me great joy."

For 25 years, Cussler's non-profit National Underwater and Marine Agency (NUMA) has challenged the seas in search of lost ships of historic significance. NUMA's discoveries, which Cussler has chronicled in his *Sea Hunter* books, are the stuff maritime archaeologists dream of. They include the wrecks of the *Carpathia*, the ship that rescued *Titanic* survivors; the Confederate sub *CSS Hunley*, the first submarine to sink a warship; the *U-20*, the German sub that sank the *Lusitania* in 1915; the *Cumberland*, sunk by the *CSS Virginia*; and the U.S. Navy airship *USS Akron*, sister ship to the *USS Macon*.

In addition to recounting NUMA's many discoveries and adventures in non-fiction books, Cussler has also thrilled generations of readers with his many action-adventure novels, including *Raise the Titanic!*


"No one has introduced the concept of the historical importance of these wrecks to a

wider audience," says John B. Davis, a long-time collaborator, friend and film producer. "Whether directly or sublimely through his novels, he has touched many people. All of his books include aspects of historical shipwrecks and preserving maritime heritage so that when readers dive into his books they are also getting a tour through some element of our maritime history."

"Clive's personal commitment to bringing the nation's maritime heritage to all Americans is in the highest tradition of public service," says Danel J. Basta, director of the NOAA National Marine Sanctuary Program.

Each shipwreck is a time capsule preserving clues to the stories of a nation's past. But what grabs Cussler most are the personal stories of the people who went down in a ship, or were associated with a disaster.

"I remember a story about the *Lexington*, a steamship that caught fire off Long Island killing all but four of its 150 crew and passengers," says Cussler. "In January of 1840, the *Lexington* pulled out of its pier on Manhattan's East River bound for Stonington, Conn. Meanwhile a young fellow running down the dock sees the ship pull away, and thinks about jumping on board. He decides he better not try it. He goes back to his hotel and writes a note to his father that he missed the boat, and will board another the next day...signed William Wadsworth Longfellow."

Thinking of a becoming a shipwreck hunter? If so, Cussler has some advice. "If your calling pulls you seaward, then never loose that thirst. Be addicted. Be hungry - and go find that ship! You can't find it if you don't look for it." 



NATIONAL MARINE  
SANCTUARIES

The National Marine Sanctuary  
Program is part of the NOAA  
National Ocean Service

1305 East-West Highway  
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<http://sanctuaries.noaa.gov>



SANCTUARY  
WATOH

### vision

People value marine  
sanctuaries as  
treasured places  
protected for future  
generations.

### mission

To serve as the trustee  
for the nation's system  
of marine protected  
areas to conserve,  
protect and enhance  
their biodiversity,  
ecological integrity, and  
cultural legacy.

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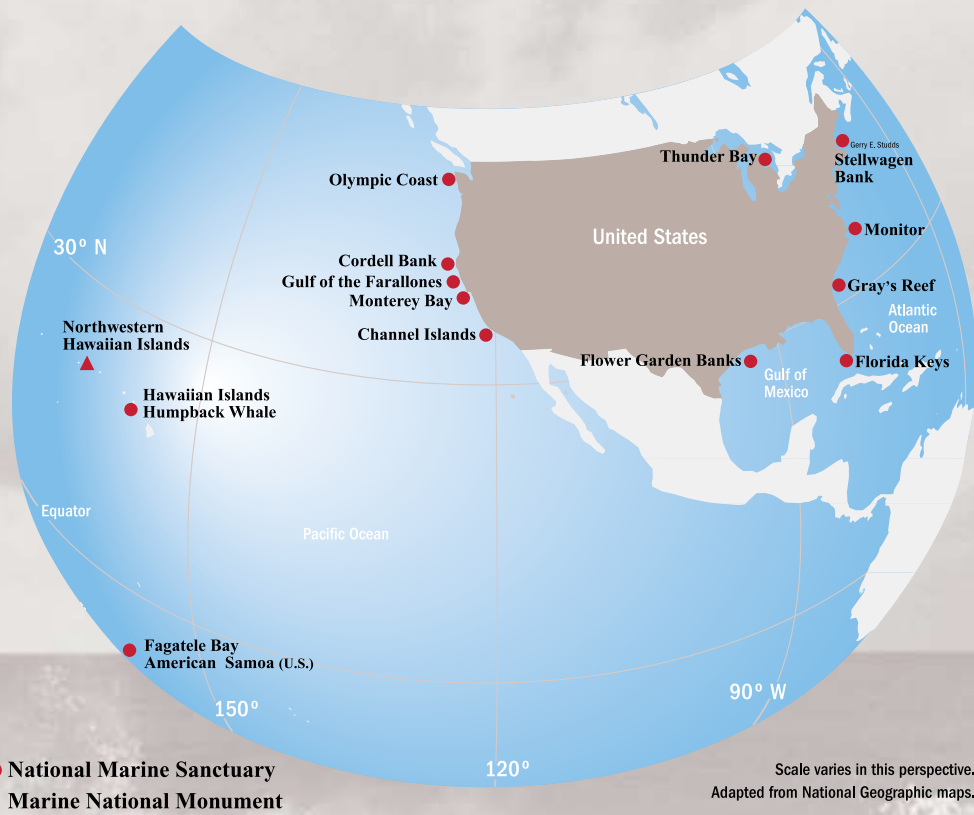
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## National Marine Sanctuary System



The National Marine Sanctuary Program serves as the trustee for a system of 14 marine protected areas, encompassing more than 150,000 square miles of ocean and Great Lakes waters. The system includes 13 national marine sanctuaries and the Northwestern Hawaiian Islands Marine National Monument. The sanctuary program is part of the National Oceanic and Atmospheric Administration (NOAA), which manages sanctuaries by working cooperatively with the public to protect sanctuaries while maintaining compatible recreational and commercial activities. The program works to enhance public awareness of our nation's marine resources and maritime heritage through scientific research, monitoring, exploration, educational programs and outreach.