



Healthy Oceans ~ Healthy Planet

ANNUAL REPORT 2011



A MESSAGE FROM THE PRESIDENT



It is with great pleasure that I present our 2011 annual report on the activities of Hubbs-SeaWorld Research Institute.

HSWRI has dedicated nearly 50 years to understanding human interactions with the ocean and its inhabitants and seeking solutions to minimize impacts. The entire focus of our research is finding these solutions to these types of

problems. Inside these pages you will read about some of our scientists outstanding accomplishments of 2011 such as:

- » the continued expansion of our whale shark research program, the largest research program in the world on the largest fish in the world;
- » the first successful shipment of Yellowfin tuna eggs and larvae into the United States, a major breakthrough in the cultivation of this tuna to ensure future availability of this nutritious seafood;
- » the inclusion of HSWRI's sea turtle tracking research into SeaWorld San Diego's new *Turtle Reef* exhibit, a real-time display that ties the sea turtles in front of the visitors to the same turtles in the wild.

We can't have a human healthy population without having a healthy ocean. We get our food from the ocean, we rely on it for transportation, for biomedicine, for defense and security, and for esthetic enjoyment and recreation, so anything we do to degrade the ocean not only affects our economy it also affects our quality of life.

What we do has never been more important. Ultimately, our success depends on the generosity of the community. I thank all of you who have supported us over the years and hope that those of you who are just learning about us will consider supporting our outstanding scientists as they continue to look for solutions that advance conservation and stewardship of the world's oceans.

Don Kent
President



A MESSAGE FROM THE CHAIRMAN

When my father, Milt Shedd, founded Hubbs-SeaWorld Research Institute in 1963, his vision was an institute that would "return to the sea some measure of the benefits derived from it." Nearly 50 years later, the Institute's scientists, staff and trustees remain dedicated to that mission. Our scientists are driven to finding solutions that enable humanity to live in harmony with the oceans, not to garnering publicity. This speaks to the most basic ethics of the Institute, which is essentially a problem-solving organization.

The scientific excellence the Institute achieves year after year deserves the enthusiastic support of individuals, businesses, government agencies and foundations. Our researchers do their part. Not only do they put in extraordinary hours working on their scientific projects but they also are tasked with writing proposals that will financially support these efforts.

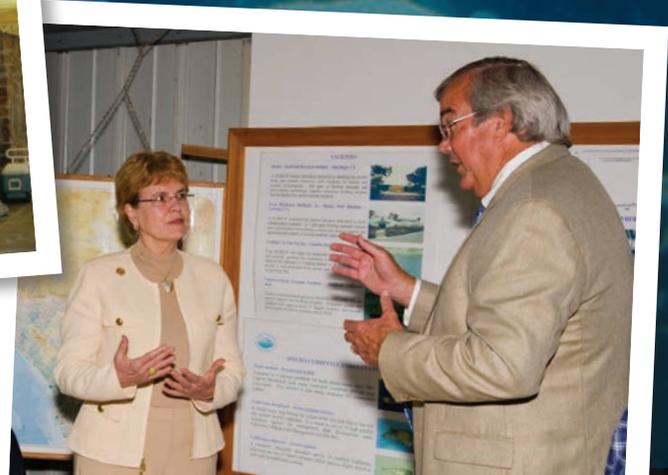
This year we are especially proud of the recognition of Dr. Brent Stewart, who received the Explorers Club's Lowell Thomas Award for his lifetime of contributions to scientific research. Past winners of the award include Carl Sagan, Sir Edmund Hillary, and Wally Schirra. I congratulate Dr. Stewart in being included with these outstanding explorers and scientists.



Our Board of Trustees is committed to helping the Institute in this valuable work, and we encourage you to do the same. We are fortunate, and deeply appreciate, that so many of you have chosen to continue your support. If this is your first introduction to the Institute, I encourage you to take a closer look and join us as we seek to secure the health of

our oceans and ultimately our planet. Together all of us can continue to advance the mission our founder, my father, so clearly articulated nearly 50 years ago.

Bill Shedd
Chairman of the Board of Trustees



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scientists

Our researchers are the heart of the Hubbs-SeaWorld Research Institute. Individually and collectively, our scientists are the foundation of the Institute's creativity, scientific accomplishments, and world-wide reputation.

They are responsible for:

- » developing and implementing the research and conservation initiatives of the Institute.
- » mentoring young scientists and students.
- » interacting with the public, policy makers and the broader scientific community.
- » generating revenues through grants and contracts that are essential to the continued existence of the Institute.

SENIOR RESEARCH SCIENTISTS

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The 2011 fiscal year challenged us as never before, as public and private funding for science continued to shrink at local, state and federal levels. Traditional sources of the backbone grants that underpin research programs cut back on their competitive, extramural grant programs and are offering smaller and shorter awards. Some funding organizations, for the first time ever, did not accept proposals at all and this trend is expected to worsen as budget cuts from the debt-ceiling negotiations begin to sink in.



Hubbs-SeaWorld Research Institute received increased national attention in 2011, hosting visits by NOAA Administrator, Dr. Jane Lubchenco and the head of NOAA's National Marine Fisheries Service, Eric Schwaab.

Media attention to HSWRI programs was strong this past year. Here are a few examples:

- » A film company associated with the National Council for Science and the Environment produced a mini-documentary about HSWRI, *Science in the Sea*. The Institute was one of only eight U.S. scientific organizations to be highlighted in the 5-minute documentaries.
- » The Department of Interior produced and is airing daily to visitors to the Channel Islands National Park, documentary that highlights HSWRI's research within the National Park on seals and sea lions.
- » Animal Planet's new series *I, Predator* featured interviews and other information provided by HSWRI scientists during its "Polar Bear vs. Seal" episode.
- » The release of the motion picture *Dolphin Tale*, about a severely injured dolphin calf, has brought new accolades for the Institute's marine mammal stranding research and response program. It was a member of the HSWRI team who spent many hours in the cold water with the young calf, caring for her until reinforcements arrived to transport her to a rehabilitation center for further care.

Another significant event in 2011 was the awarding of The Explorers Club's Lowell Thomas Award to Dr. Brent Stewart, in recognition of his contributions to scientific discovery. The Explorers Club, founded in 1904, counts among its members those who were

first to the North Pole, first to the South Pole, first to the deepest point in the ocean and first to the surface of the moon. Past winners of the award, named in honor of the American writer and explorer who made Lawrence of Arabia famous, include Carl Sagan, Sir Edmund Hillary, and Wally Schirra.

AQUACULTURE

Researchers at HSWRI and the Inter-American Tropical Tuna Commission (IATTC) completed the first successful air shipments of yellowfin tuna eggs and larvae into the U.S. in 2011. The cultured eggs and larvae, spawned at an IATTC facility in Panama, are being used in a joint effort to advance hatchery technologies for this popular food fish. The outcome of this effort is being watched around the world, as there are very few captive breeding populations of tuna. The ability to ship eggs and larvae over great distances will open opportunities to work with these delicate, high-performance food fish. Another new program this year involves using regionally sourced fish trimmings from fish processing plants to replace industrial fish meal and fish oil in aquaculture feeds. These trimmings, a source of high quality protein, are usually discarded.

Phase II construction at our Melbourne Beach laboratory also was completed in 2011, including installation of four 5m-diameter tanks for future mariculture efforts in partnership with the Florida Marine Fisheries Enhancement Initiative. Discussions with local, state and federal partners regarding a fish replenishment hatchery in Pensacola, Florida, took place throughout 2011. There is increasing interest in a hatchery at this location as part of a regional effort to address



impacts of the *Deepwater Horizon* oil spill in the Gulf of Mexico.

BIOACOUSTICS

The HSWRI Bioacoustics Program continued its focus on research projects involving SeaWorld's animal collection.

Partnerships with the Scripps Institution of Oceanography and the University of Washington, directed toward new techniques for localizing and processing whale and dolphin vocalizations, continue. This work is supporting several graduate student projects and a number of manuscripts are nearing completion for publication in the scientific literature.

A team of scientists, students, trainers, veterinarians and animal care specialists worked closely with a stranded rehabilitated pilot whale at SeaWorld San Diego. Our bioacoustics team participated in the hearing studies that documented a severe hearing deficit in this whale and worked with his caretakers to assist in his recovery and integration with other whales at the park, and to monitor the course of his condition.

ECOLOGY

Long-term, integrated studies of marine mammals and the habitats they depend upon continued in 2011. Ecological research on marine vertebrates in coastal and offshore regions around the world ranged from 'back yard' studies of bottlenose dolphins in east central Florida and seals and sea lions off the

coast of California to a research cruise in the Antarctic pack ice.

The Institute's whale shark research program, the largest of its kind in the world, continues to expand in scope. Field expeditions to the Philippines, Western Australia, the Maldives, Kenya and West Papua took place within the last 12 months, and our scientists worked closely with local educators and others to communicate findings to local stakeholders. The results from these studies are being used by local conservation groups and resource management agencies to establish guidelines for marine protected areas and for activities such as eco-tourism.

PHYSIOLOGY/OCEAN HEALTH

The Center for Marine Veterinary Virology (CMVV) focused less on laboratory bench work and more on analysis and writing in 2011, with over a dozen papers published, in press, or in review. Although the pace of laboratory work did not match 2006-2010 levels, the CMVV did investigate several high priority disease issues in dolphins and sea



lions, working collaboratively with the U.S. Navy Marine Mammal Program, SeaWorld San Diego and University of Florida.

The HSWRI marine mammal stranding rescue and research team responded to dozens of whale and dolphin strandings in 2011, including two rare beaked whales, a right whale, and several high profile cases involving adverse human-dolphin interactions.

COMMUNITY OUTREACH AND ADVANCING SCIENCE LITERACY

SeaWorld San Diego opened its new *Turtle Reef* exhibit in 2011 and HSWRI's sea turtle tracking research is highlighted as part of the exhibit's innovative interactive educational display. The exhibit also provides near real-time information on the post-return movements of rehabilitated sea turtles tagged by HSWRI scientists just prior to their return to the ocean.

HSWRI is working with *Get Inspired!*, Inc. and Huntington Beach High School students to grow white seabass in their classroom as part of the science curriculum. Students are involved in all aspects of caring for the fish, from making seawater to feeding. The fish are an official component of the HSWRI white seabass mariculture program; as such, they are tagged and given a health inspection by state fish pathologists prior to being released into coastal waters. This program will expand to additional high schools in southern California in 2012.

In addition to public speaking engagements, scientific presentations and laboratory and hatchery tours for school and civic groups, the HSWRI team participated in a number of 'hands on' educational workshops or experiences in the past year. For a complete listing visit our website at www.hswri.org.



Creating a legacy that “returns to the sea for an eternity” You can play a significant role in assuring the success of our mission through planned giving in the form of a bequest or trust. Even persons of modest means can become donors and enjoy deep personal fulfillment as well as recognition and lifetime benefits. Your remembrance of Hubbs-SeaWorld Research Institute will provide our dedicated scientists with the necessary equipment and capital to continue to conduct vital marine research. Moreover, your bequest can help unlock some of the most mysterious questions of the sea and ensure that we conserve our oceans for future generations to enjoy.

It is important that everyone has a will and that it is carefully thought out and kept up to date. The Trustees and staff at Hubbs-SeaWorld Research Institute respectfully request that you consider remembering the Institute and its research as you make important decisions. We believe your bequest should be looked upon as an investment in the future. Like other investments, your bequest should bring personal satisfaction.

Additionally, if you have property and/or appreciated securities that could be offered today to support our research projects, our staff would be happy to talk with you. Beyond knowing that you will “return to the sea some measure of the benefit derived from it,” you may also receive significant tax benefits.

To discuss your particular interests, please call our offices at 619-226-3870 in California or 321-327-8970 in Florida. If you have already included the Institute in your estate plans, please let us know so that we may properly recognize you.

THE MILTON AND PEGGIE SHEDD ENDOWMENT CIRCLE recognizes those who have contributed to our endowment fund which is designed to ensure our research programs for generations to come:

Jill and Bill Shedd
 Carol Shedd McCarren
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 Peggie Shedd
 Terri and Steve Shedd

THE CARL L. AND LAURA C. HUBBS LEGACY CIRCLE recognizes contributors who are planning to leave lasting legacies through bequests and trusts:

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 Linda and Jack Miller
 Linda Sue Sheldon
 Tammy and Dr. Graham Worthy

Thanks to the commitment and generosity of our supporters, Hubbs-SeaWorld Research Institute scientists are able to continue to provide sustainable solutions to complex conservations problems. We are extremely grateful to those individuals, foundations and corporations listed below who have generously provided support since July 2010.

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This listing is comprised of donors who supported Hubbs-SeaWorld Research Institute from July 2010 through September 2011 and represents lifetime giving. Though we take every possible step to ensure its accuracy, with a list of this nature it is possible that an oversight has occurred. If your name has been omitted or there is an error in the listing, we apologize and ask that you contact us at 619-226-3870 or solutions@hswri.org.

*Indicates current Society Member

financial information

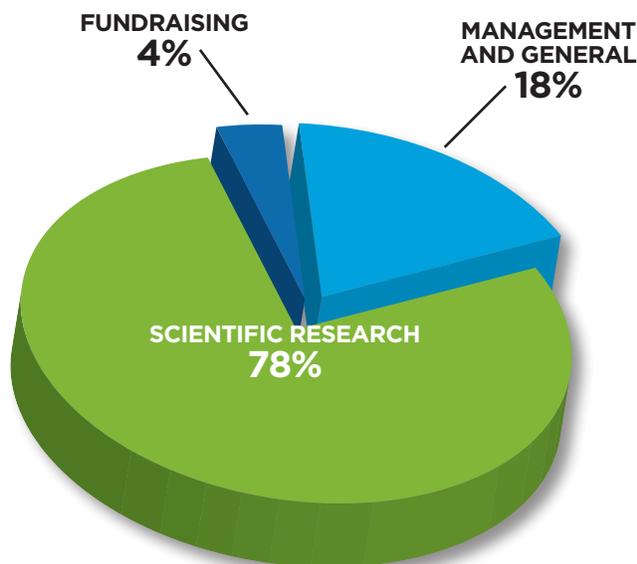
REVENUE

Research Contracts and Grants	\$4,403,421
Unrestricted Gifts	\$1,205,471
Restricted Gifts	\$20,000
Other Revenue	\$53,970
Total Support Revenue	\$5,682,862

EXPENDITURES

Scientific Research	\$4,285,727
Management and General	\$1,071,175
Fund Raising	\$182,504
Total Charitable Expenses	\$5,539,406

**CHARITABLE EXPENDITURE
 BREAKDOWN BY PERCENTAGE**



A copy of the audited financial statement is available upon request by calling 619-226-3870.



HEADQUARTERS

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*A copy of the official registration and financial information may be obtained from the Florida Division of Consumer Services by calling toll-free 1-800-help-fla (435-7352) within the state. The registration number issued to HSWRI in Florida is CH10200.