**Media:** For more information, contact SeaWorld Public Relations at (619) 226-3929.



**SEAWORLD CARES, 365 DAYS A YEAR**

**Water conservation, animal rescue and research are just a few examples of environmental stewardship**

SeaWorld® San Diego has been a global leader in marine animal care and welfare, education, conservation, research and rescue for more than five decades. Every day, SeaWorld educates and excites park guests, creating meaningful experiences that inspire them to not only care more for wild animals and wild habitats, but also to act to help protect the environment. While guests are enjoying all of the world-class animal shows, exhibits and education programs SeaWorld is famous for, behind the scenes there is a mission—one that has continued since the park’s inception—to care for the environment and the animals that extends beyond the park’s borders.

**SeaWorld Animal Rescue and Rehabilitation Program**

             Since 1965, SeaWorld® San Diego has rescued more than 16,000 animals, with sea lions, seals and marine birds comprising the vast majority of those animals rescued. The park’s Rescue Team also routinely comes to the aid of dolphins, whales and sea turtles. In 2015, SeaWorld rescued a record-breaking number of California sea lions as a result of an Unusual Mortality Event (UME) that caused juvenile sea lions to strand on beaches along the central and Southern California coastline. The marine mammal species rescued in 2015 were: 990 California sea lions, 31 northern elephant seals, 24 harbor seals, 10 fur seals and two common dolphins. The mammal team also responded to five entangled humpback whales and one fin whale off the Southern California coast in 2015, successfully disentangling three of the humpback whales. The park’s aquarium team came to the aid of three sea turtles, and the park’s bird team also was busy, taking in and caring for 386 marine birds, including grebes, pelicans, gulls, herons and dozens of other species.

To care for stranded animals, the SeaWorldAnimal Rescue Center is equipped with state-of-the-art tools, facilities and equipment to provide the best possible care for ill or injured wildlife:

* Critical care unit with built-in weighing scale
* Medical facility, which houses laboratory with latest diagnostic equipment, antibiotics, intravenous fluids and other medications
* Surgical suite, which contains custom surgery table, X-ray, ultrasound, endoscopy and anesthesia equipment
* Food preparation room, where special diets for rehabilitated animals are prepared
* Examination room with digital radiograph system that communicates with the digital radiograph storage server with all other SeaWorld and Busch Gardens® parks
  + Digital radiograph system features a wireless cesium plate that can be used at a distance of up to 50 feet away from the laptop capture unit, enhancing the portability for use in animal habitats in the park or in the wild; new cesium plate is very sensitive, allowing for lower radiation yet providing high-quality images
* 40-inch viewer that allows SeaWorld's veterinarians to compare radiographs side by side; large screen enables doctors to view radiographs in close detail when examining for internal injuries
* Boston Whaler with two 600-horsepower outboard engines; this 27-foot boat, named Second Chance, is bigger and has a greater load carrying capacity than the previous SeaWorld rescue boat; it also has an unsinkable hull, a large dive door and state-of-the-art navigation technology
* Recovery areas, including pools and enclosures, tailored to meet the specific needs of each rehabilitating animal

Once a rescued animal is medically rehabilitated and demonstrates to the animal care team that it is able to fend for itself, it is returned to the ocean. To give these animals the best chance at survival, SeaWorld often returns them to the ocean by boat. Sea lions, seals and dolphins are typically returned anywhere from two to 15 miles off the coast in areas where sufficient food sources are available and are populated by like species.

SeaWorld is part of the West Coast Marine Mammal Stranding Network, which is organized by the National Marine Fisheries Service (NMFS). Members of the public, lifeguards and other individuals report strandings to SeaWorld’s rescue hotline (800-541-SEAL) or on SeaWorld’s website ([***www.SeaWorldSanDiego.com***](http://www.SeaWorldSanDiego.com), click on Animals, then Report Stranded Animals). SeaWorld team members respond, using guidelines governed by NMFS. Once rescued, animals are nursed back to health and, whenever possible, returned to the wild. If an animal is deemed not releasable, NMFS determines whether the animal is to remain at SeaWorld or to be cared for at another facility.

Marine mammals such as seals, sea lions, sea otters, dolphins, whales, sea turtles and seabirds may strand for a variety of reasons: illness, injury, exhaustion or separation from their mother. Two of the most common conditions are malnutrition and dehydration. In addition, animals also may become entangled in nets, ropes or fishing line; accidentally ingest plastic or other foreign objects; suffer habitat loss, which occurs as a result of human development, over harvesting of natural resources; or oil spills.

Park guests can learn more about SeaWorld’s rescue program by visiting the Rescue Plaza near Shamu Stadium, where video screens play footage of marine animals that were given a second chance at life. And, the public at large can tune it to “Sea Rescue,” which tells the stories of marine animal rescue, rehabilitation and return by the SeaWorld rescue team and its partners. Airing on ABC on Saturdays, the popular show is in its fifth season.

**Unparalleled Access for Scientific Research**

High-quality research is a key component of the park’s larger commitment to conservation. SeaWorld® publishes peer-reviewed research, provides access to its animals for scientists conducting studies on a variety of subjects, and funds and supports projects around the world as part of the mission of the SeaWorld & Busch Gardens Conservation Fund.

Here are just some of the recent and current projects:

**Killer whale milk study:** New research is being conducted with killer whales at SeaWorld® San Diego to assess the dynamics of persistent organic pollutant transfer from female killer whales to their calves during gestation and lactation. Dr. Dawn Noren, a research fishery biologist with the National Marine Fisheries Service’s Northwest Fisheries Science Center in Seattle, is studying milk and blood serum samples from Kalia, a lactating killer whale at SeaWorld who gave birth to a calf in December 2014. By analyzing these samples, Noren is assessing the transfer of compounds in milk from females to their calves during lactation. Blood samples from Kalia’s calf, Amaya, are also being analyzed. It is hoped that this multi-year study will provide insight into one of the key risk factors identified for the endangered Southern Resident killer whales in the Pacific Northwest.

**Penguin dive study:** Research physiologist Dr. Paul Ponganis from Scripps Institution of Oceanography at University of California, San Diego is currently studying how emperor penguins maneuver under water and what they eat, as part of a study approved by the National Science Foundation. Ponganis attached backpack cameras to emperor penguins (SeaWorld® San Diego has the only emperor breeding colony in the western hemisphere) in February of 2015; after confirming that the penguins could easily swim with the cameras and that the footage gathered was valuable, Ponganis can now take the experiment to the wild, attaching the cameras to emperors in the Antarctic to learn more about their biology and how the species is responding to climate change.

**Carbon monoxide study:** It’s commonly known that the colorless, odorless gas known as carbon monoxide is deadly at high levels, but new research shows it can actually be beneficial in the right concentrations in marine mammals. Scientists at Scripps Institution of Oceanography at University of California, San Diego, led by graduate student Michael Tift, are studying levels of carbon monoxide in killer whales, pilot whales, beluga whales and dolphins at SeaWorld® San Diego. This research advances understanding of diving physiology in cetaceans and has application for advancing medical care in humans.

**Killer whale heart monitor study:** New research is being conducted with a killer whale at SeaWorld® San Diego to evaluate cardiac function using a heart monitor adapted for the marine environment. This work not only will benefit veterinarians’ diagnostic efforts, but may be essential to improving cardiac monitoring of free ranging whales and understanding diving physiology. Dr. Paul Ponganis, a research physiologist at Scripps Institution of Oceanography at University of California, San Diego, is currently studying electrocardiograms and heart rate of Corky, a 51-year-old killer whale, as well as other animals at the marine park. The study is looking to develop reliable techniques to record electrocardiograms on whales while they are in the water, document cardiac characteristics at rest and during exercise, and develop reliable suction cup attachment techniques that can ultimately be applied to large whales in the wild.

**SeaWorld’s scientific partner since park inception:** Hubbs-SeaWorld Research Institute (HSWRI) is a public, non-profit organization dedicated to providing effective solutions to conflicts that arise between human activity and the marine world. HSWRI was founded in 1963, a year before SeaWorld® debuted as a marine-animal park on Mission Bay. Access to SeaWorld's extensive marine zoological collection and superb facilities are unique assets that provide the Institute with unparalleled opportunities to advance its public-trust mission “*to return to the sea some measure of the benefits derived from it*.” HSWRI projects involving the animals at SeaWorld, such as polar bear hearing studies, are providing information that would be impossible to obtain in the wild. In 2015, Dr. Brent Stewart, HSWRI senior researcher, attached satellite transmitters to several California sea lions and Guadalupe fur seals that had been rescued and rehabilitated, for the purpose of gaining crucial data about where the two species travel, spend time foraging for food, and ultimately thrive in the ocean.

**Bye-Bye Plastic Bags!**

In 2011, SeaWorld® San Diego eliminated the use of plastic bags in the park’s gift shops. Plastic bags are a huge problem for certain species of sea turtles, especially leatherbacks, which sometimes mistake the bags for jellyfish. As part of the park’s “Creating a Cleaner World” program, guests can purchase either a paper bag or reusable bag when purchasing items from the gift shops. Net proceeds from the purchase of paper shopping bags are donated to Hubbs-SeaWorld Research Institute (HSWRI), while 5 percent of a reusable bag’s purchase goes directly to the SeaWorld & Busch Gardens Conservation Fund. Paper shopping bags are available for guests to purchase at the park’s gift shops at 10 cents each, and reusable shopping bags for as low as 99 cents.

**SeaWorld Continues to Advance Water Conservation**

SeaWorld® San Diego has been advancing water conservation measures for the past several years, and will continue these practices, which are even more important as the severe California drought continues. In April 2015, SeaWorld implemented a saltwater flushing system in its newest restroom replacement. The conversion has resulted in more than 1.5 million gallons of water saved annually. Located near Shamu Stadium, the restroom facility is 3,000 square feet with 21 urinals and 34 water closets that contain individual partitioned toilets that utilize salt water for flushing.

Since 2008, SeaWorld has engaged in a variety of initiatives to reduce water usage in the park. In addition to the saltwater restroom project, the park purchased a Cyclone CY5500 and Advance Ride-On Scrubber deep cleaning concrete device to clean its pathways, saving more than a million gallons of fresh water annually.

The park also has introduced several other water-savings measures and operating standards, including an increased installation of drought-tolerant plants, computerized irrigation controllers and 4,000 low-flow irrigation nozzles. SeaWorld also has increased the mulching of landscape areas to conserve soil moisture, and replaced some lawn areas with artificial turf.

The increased use of high-pressure water machines, and high-efficiency, low-flow toilets and sinks with aerated faucets in its restrooms also contributes to SeaWorld’s water conservation efforts.

**Elimination of Polystyrene Foam Products**

SeaWorld® San Diego eliminated all polystyrene tableware and flatware in its restaurants and employee cafeterias in the fall of 2013. With millions of meals served in the park each year, the removal of polystyrene foam products is heralded as another important conservation and environmental stewardship initiative by SeaWorld. Discarded polystyrene foam, which is not biodegradable, ends up in local landfills, on beaches and in the ocean ecosystem. This pollution can be extremely detrimental to marine animals. In all, more than 8 million individual pieces of tableware and cutlery—plates, bowls, hot cups, forks, spoons and knives—were shifted to compostable material. Bowls and plates are now made from molded fibers, flatware is now made from cornstarch, and hot cups are made from recycled paper.

**Breeding Successes**

SeaWorld Parks & Entertainment® is a global leader in animal husbandry, training and veterinary care, all of which have led to highly successful breeding programs of threatened and non-threatened species. More than 80 percent of the marine mammals and birds in SeaWorld’s care were born in the parks. SeaWorld® San Diego welcomed its newest addition to its family of killer whales, a female calf, on Dec. 2, 2014. This latest birth marks the seventh successful killer whale to be born at SeaWorld San Diego in its 52-year history, and the 29th successful killer whale calf to be born across all SeaWorld parks since the program’s inception in 1985.

SeaWorld also is renowned for its successful penguin breeding program. Since 1980, more than 600 penguin chicks have been hatched and raised at SeaWorld San Diego alone, including the first-ever chinstrap and emperor penguins. SeaWorld aviculturists have had a worldwide impact on pioneering techniques for rearing penguin chicks.

SeaWorld incorporates both natural breeding and assisted reproductive technologies within its breeding program to maintain genetically diverse and sustainable populations in cooperation with other accredited zoos. The [SeaWorld and Busch Gardens Reproductive Research Center](https://seaworld.org/Conservation-and-Research/Reproductive-Research-Center) is at the forefront of research for monitoring the reproductive health of marine animals in zoos and in the wild, and has pioneered assisted breeding technologies including sperm cryobanking (a form of biodiversity preservation) and artificial insemination for maximizing population reproductive health and sustainability. Since the world’s first marine mammal, a killer whale, was conceived through artificial insemination in 2000 at SeaWorld San Diego, more than 50 calves from four species of whales and dolphins have been born at SeaWorld parks and collaborating zoos across the globe using this technique.

Sex predetermination using sperm sorting is another technology which has been pioneered in the zoo field by the reproductive center’s scientists, and enables population sex ratios to be similar to those in the wild. Twenty-nine pre-sexed bottlenose dolphin calves have been born worldwide as a result of this research, and SeaWorld continues to advance sperm sorting and sperm cryobanking technologies as conservation tools for threatened species at the reproductive center’s state-of-the-art facilities. World-first hatchings also have occurred with SeaWorld San Diego’s Magellanic penguin colony. The first artificial insemination chicks of any penguin species (hatched in 2013) and the first using frozen semen (hatched in 2014) are on display at the Penguin Encounter’s outdoor habitat of Magellanic penguins. SeaWorld’s research is revealing new information on penguin reproductive biology and has important implications for understanding and conserving wild populations.

**Recycling Efforts**

SeaWorld® San Diego continues to embrace initiatives that address some of today’s most pressing environmental challenges in the areas of waste, water and food.

Every year SeaWorld recycles millions of pounds of paper and plastic products, metals, greenery, food scraps, pallets, cooking oil, construction demolition debris and batteries, in addition to more traditional recyclable materials. Since 1996 the park has received San Diego’s Recycler of the Year or Director’s award 18 times and is a nine-time recipient of the prestigious State of California Waste Reduction Awards program.

**Oiled Wildlife Care Center**

SeaWorld® San Diego’s Oiled Wildlife Care Center (OWCC) was built to care for animals that fall victim to oil spills. The 8,000-square-foot center was established in 2000 by SeaWorld San Diego, the California Department of Fish and Wildlife and the University of California, Davis. It includes examination, treatment and food preparation areas, an aviary and a 32,000-gallon rehabilitation pool that can hold 20 oiled sea otters or pinnipeds in the event of an oil spill in Southern California. The facility can treat as many as 200 oiled seabirds at a time.

Animal care specialists from SeaWorld’s bird, fish and mammal departments have received Oiled Wildlife Care Network (OWCN) certification and annual training to care for oiled wildlife. When the center is not being used for oil spill rescue, it houses rehabilitating marine mammals, sea turtles and seabirds.

In May of 2015, SeaWorld’s team was called upon to assist with the rescue and rehabilitation of marine animals affected by the Refugio Oil Spill in Santa Barbara, California. Members of SeaWorld San Diego’s OWCN Response Team cared for oiled marine mammals at the park’s OWCC and, in addition, members of the team were deployed to the spill zone to assist with recovery efforts.

**Education and Conservation**

The education programs at SeaWorld® and Busch Gardens® have helped schools, teachers, children and adults explore the world and all its inhabitants by providing award-winning education programs that include structured teaching. There also are many informal teaching experiences inside the parks: educators, show and exhibit narrations, and interpretive and interactive graphics. SeaWorld’s Instructional Field Trip program offers students from preschool through college an opportunity to use the parks as their own outdoor classroom.

“Shamu TV,” the Emmy award-winning environmental education series from SeaWorld and Busch Gardens, brings viewers face to face with the wonders of wildlife. Online viewers have the opportunity to watch an entire 30-minute episode or shorter, five- to 10-minute segments featuring stories about amazing animals and the remarkable efforts of people working together to save some of the world’s most endangered and threatened species.

“Shamu TV” is accessible in school classrooms via computer, and on-the-go through tablet and hand-held devices via ShamuTV.com and YouTube. A “Teacher Toolbox” full of activities, reference materials and resources to enhance lesson planning is available for teachers online. “Shamu TV’s” *Saving a Species* series is produced by the SeaWorld/Busch Gardens Education Departments.

For more information about how SeaWorld cares for the world we share, please visit [***www.SeaWorldCares.com***](http://seaworldcares.com/)***.***

**—SeaWorld—**

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