

Written Testimony Submitted for the Record
House Natural Resources Committee
Subcommittee on Insular Affairs, Oceans and Wildlife

Marine Mammals in Captivity: What Constitutes Meaningful Public Education?

April 27, 2010

SeaWorld Parks & Entertainment appreciates the Subcommittee's interest in education and conservation programs at zoological parks. And we understand that in anticipation of a proposed regulation covering the permitting processes under the Marine Mammal Protection Act, you have asked for SeaWorld to comment on the adequacy of the professionally recognized standards governing public display, whether the federal government should regulate the public education programs at zoos and aquaria, and how our public education programs are evaluated.

For the reasons explained herein, we believe the current standards encourage and require exceptional public education programs and that additional federal regulations are not needed.

SeaWorld offers world class zoological experiences at our parks in Orlando, Florida, San Diego, California and San Antonio, Texas along with our Busch Gardens parks in Tampa, Florida and Williamsburg, Virginia. We thank the Committee for this opportunity to share information about SeaWorld and, particularly, its education and conservation programs.

SeaWorld has the largest zoological collection in the world – more than 65,000 animals, including nearly 200 endangered, threatened and at-risk species. We also have a 46-year history of leadership in wildlife conservation and education. The success of the parks' animal rescue and rehabilitation programs, educational programs and endangered species breeding programs are unparalleled in the world.

SeaWorld has a multi-faceted mission. Our parks are entertainment and education centers. We work hard to ensure that our patrons leave our facilities having had an enjoyable experience, and with greater knowledge of and appreciation for animals and the natural world. "The "multiple facets" of our business are interrelated; entertainment, education and the research components all complement each other.

As an education, research and conservation center, we devote substantial resources to learning more about the animals in our care, both independently and in partnership with research facilities around the world. A key component of our conservation mission is to rescue, rehabilitate and then release animals in need. We rescue and rehabilitate more marine animals than any other organization in the world.

SeaWorld and Busch Gardens: A Continuing Commitment to Education, Research and Conservation

Each year, more than 12 million people visit a SeaWorld park. Creating a connection between people and animals is the critical first step in educating our visitors about the importance of conservation. Since the first SeaWorld park opened in 1964, more than 525 million people have been brought closer to the marine environment at SeaWorld.

In 2009 alone, SeaWorld conducted more than 500,000 hours of structured teaching involving more than half a million guests.

The exhibits at SeaWorld are designed to inspire visitors to conserve our valuable natural resources by increasing awareness of the interrelationships between humans and the environment.

SeaWorld and Busch Gardens employ the largest and most-experienced team of veterinarians, trainers, and animal care specialists in the world. The parks also employ educators who teach a wide variety of programs. Those educators also reach millions of people who have never visited a SeaWorld park, through distance learning programs.

Conservation education is one of the key components of the accreditation process for the Association of Zoos and Aquariums (AZA) and the Alliance for Marine Mammal Parks and Aquariums (the Alliance). Our parks also meet the conservation education requirements and other standards of the American Camping Association.

SeaWorld's conservation efforts are not limited to its parks. In 2003 a non-profit foundation, the SeaWorld & Busch Gardens Conservation Fund, was created to further promote conservation. To date, the Fund has granted more than \$6 million to 400 projects across 60 nations. The Fund's grantees are diverse, including global organizations such as World Wildlife Fund, The Nature Conservancy, Conservation International, as well as smaller, grassroots organizations. The Fund focuses its resources in four areas: species research, habitat protection, animal rescue and conservation education.

Conservation – Education

Education is a cornerstone of SeaWorld parks. We believe that firsthand experience with animals is the best way to create a lasting appreciation and respect for animals and the environment. Our animal attractions and exhibits are designed to inspire park visitors through multiple levels of learning opportunities, including exciting and entertaining marine animal shows, live interpretation, static graphics, video displays, and interactive learning tools. All SeaWorld education programs are consistent with AZA standards. In addition, half a million students and guests participate in in-park education programs, ranging from sleepovers and summer camps to school trips and behind-the-scenes tours. These hands-on, in-depth programs promote an appreciation of and stewardship for animals and the environment that cannot be replicated elsewhere. It is important to note that these programs bring people into contact with animals most will never see in the wild.

Consistent with AZA Standard 4.2.3¹, our educational reach extends into classrooms and homes across the U.S. and the world. SeaWorld's commitment to teachers is evidenced by our teacher workshop series and our extensive classroom resources, including species information books, teachers' guides, DVDs, posters, student incentives, and books for young learners. Several of these programs have been honored with Teachers' Choice Awards. Through partnerships with organizations such as the National Science Teachers Association (NSTA) and the National Marine Educators Association, SeaWorld and Busch Gardens help promote science teaching and learning. For five years in a row SeaWorld has sponsored an "Outstanding Environmental Educator of the Year" award, a recognition given jointly by NSTA and SeaWorld/Busch Gardens to a deserving science teacher.

SeaWorld also rewards those who take action to make a difference. The "SeaWorld/Busch Gardens Environmental Excellence Awards" grants \$80,000 to students and teachers across the U.S. who work at the grassroots level to protect and preserve the environment. Since 1993 this program has awarded more than \$1.6 million to 130 schools in 43 states.

SeaWorld's educators have also created distance learning programs such as Shamu TV, an Emmy-award winning education series that is available to more than 50 million viewers each year. In addition, SeaWorld maintains the largest animal information Web site of any zoological organization at www.seaworld.org. ANIMALS features more than 4,000 pages of zoological, ecological, and conservation-minded materials –including multimedia – photo, video, and audio of species reference sources, classroom curriculum, conservation project calls-

¹ AZA Standard 4.2.3 states:

"Cooperative programs with educationally-focused local/national groups (universities/colleges, nature centers, conservation organizations, museums, governmental agencies, etc.) should be developed."

to-action, zoological career information, and environmentally focused family resources. In just two years, more than 12.5 million guests have visited ANIMALS at www.seaworld.org.

Finally, SeaWorld shares the concerns of many in Congress that American science education is losing ground to other nations. Like many zoos and aquariums around the country, we do our part to support and enhance students' exposure to the biological sciences by promoting direct interactions with both our animals and our research facilities, explaining the animals' roles in the marine ecosystem, and inspiring students to learn more about and become more active in conservation science.

Conservation - Rescue and Rehabilitation

For more than 46 years, SeaWorld and Busch Gardens have helped animals in need – whether ill, injured, abandoned or orphaned. More than 17,000 animals have been rescued through this program since 1970, including endangered and threatened species such as Florida manatees, sea turtles, sandhill cranes and gopher tortoises. SeaWorld and Busch Gardens are part of an animal rescue system established by federal, state and local government agencies. SeaWorld and Busch Gardens veterinarians and animal care specialists assist animals 24 hours a day, 7 days a week, 365 days a year.

In 2009 alone, SeaWorld devoted more than \$1.5 million to rescue and rehabilitation of animals in need. Equally compelling is the “sweat equity” freely donated by SeaWorld staff. A good example: cold-stunned sea turtles all along the southeastern U.S. shoreline were assisted by SeaWorld staff. In coordination with state and federal officials – and in cooperation with marine and zoological organizations throughout the region – both SeaWorld and Busch Gardens provided housing and critical care for more than 250 sea turtles.

Manatees also are suffering the effects of a harsh winter. SeaWorld has rescued a record high number of manatees. Just recently, a team from SeaWorld Orlando released a manatee and its calf that had been rescued in January.

Conservation – Research

SeaWorld and Busch Gardens work closely with leading scientists, including the independent Hubbs-SeaWorld Research Institute (HSWRI). The non-profit HSWRI was established by SeaWorld's founders in 1963. Its mission is “...to return to the sea some measure of the benefits derived from it.” Originally chartered as a private non-profit organization, HSWRI has operated as a 501(c)3 public charity since 1998 and is recognized as a leader in marine conservation research around the world. The SeaWorld & Busch Gardens Conservation Fund also provides millions of dollars to support these conservation efforts.

Studies of the animals in our care complement research efforts in the field. Also, data we collect from caring for rescued animals can help scientists more accurately assess threats to many at-risk species.

The scientific data gathered from killer whales in zoological settings is having an immediate impact on wild populations. There are many recent examples:

- Killer whales are one of the few species known to have social dialects. There appear to be parallels between killer whale dialect development and the stages of learning in humans. A better understanding of dialect development in killer whales may cast light on the evolution of human language.

Studies of the dialects of individual wild killer whales have been challenging because behavioral interactions cannot be observed underwater. Using the unique characteristics of Shamu Stadium pools (underwater viewing and hydrophone array), scientists from Hubbs-SeaWorld Research Institute have made significant progress in developing tools to identify calling whales.

Scientists from Hubbs-SeaWorld Research Institute were able to apply bioacoustic research to help Alaskan fishermen struggling with killer whales taking black cod off their lines. Tensions had escalated to the point where fishermen were applying for permits to use explosives, and many whales were being shot. Institute scientists, working with hearing sensitivity curves developed from studies on SeaWorld killer whales, were able to make fishing boats more difficult for whales to detect.

- Knowing how much energy a whale requires is fundamental to resolving a number of questions about the role whales play in their ecosystem. The SeaWorld & Busch Gardens Conservation Fund supports a study to help determine how whales have solved the complex relationships of energy intake and expenditure and what their food requirements are. By assessing the metabolic rate of killer whales at SeaWorld and relating it to heart rate, scientists can evaluate metabolic rates of free-ranging whales and ultimately apply this information to the conservation and protection of wild whales.
- Over the past few years, the predatory behavior of killer whales has moved into the forefront of public discussions. Between 1990 and 1998, largely due to killer whale predation, scientists concluded that a single killer whale could consume as many as 1,825 otters per year. Calculations of this kind depend upon understanding the predator's metabolic needs – information that is not available for

killer whales. Killer whales at SeaWorld are providing scientists from the University of Central Florida with an opportunity to measure physiological parameters such as heart rate, metabolic rate and thermal balance under controlled conditions, and to evaluate how these parameters may be affected by age or body mass.

- SeaWorld's killer whale breeding program has also made major contributions to the understanding of killer whale biology, reproductive physiology and husbandry.

In a conservation sense, the killer whales at SeaWorld provide a living laboratory for developing knowledge and techniques crucial to the survival of endangered or threatened killer whale stocks.

Conservation - Breeding

SeaWorld is the global leader in the field of killer whale and dolphin reproduction including its pioneering work on killer whale artificial insemination. More than 80 percent of the marine mammals at SeaWorld were born in SeaWorld parks.

Killer whale breeding firsts at SeaWorld include:

- The first killer whale to be born and thrive at any zoological park occurred at SeaWorld Orlando on September 26, 1985. This whale has grown to have several calves of her own.
- First to have a second generation killer whale calf.
- First to have a third generation killer whale calf.
- The first killer whale calf conceived through artificial insemination (AI) was born at SeaWorld on September 1, 2001. His birth was the result of 15 years of research on killer whale reproductive biology. The second calf was born May 3, 2002. Both AI-conceived calves were born at SeaWorld San Diego, but the father was 3,000 miles away at SeaWorld Orlando.

The Accreditation Process

SeaWorld and Busch Gardens parks are accredited members of the Association of Zoos and Aquariums (AZA). SeaWorld parks also are accredited members of the Alliance for Marine Mammal Parks and Aquariums (Alliance). We are also accredited by 19 other respected national and international groups with specialties in education, conservation, and animal care. Examples include the National Marine Educators Association, the National Science Teachers Association, and the Society of Marine Mammalogy. Other organizations we work with include the American Veterinary Medical Association and the International Association for Aquatic Animal Medicine. All of these organizations

together provide a greater breadth of expertise and experience on education than any federal program could hope to provide. Public education programs at zoos and aquaria is simply not an area which the federal government needs to regulate

Recognizing that zoos and aquariums are constantly evolving and standards are continuously being raised, both AZA and the Alliance require accredited facilities to adopt and go through the entire accreditation process on a regular basis to prove it. AZA requires members to be accredited every five years. The Alliance recertifies every five years

With respect to the AZA requirements, SeaWorld's public education program fully complies with part 4 of the AZA's 13-part Accreditation Standards ("Education and Interpretation").

- Education is a key element of our mission, as we have extensively discussed herein.
- Our education program is professionally staffed and involves extensive cooperation with educationally focused local/national groups.
- SeaWorld exhibits are regularly evaluated and improved based on our ongoing research programs and gains in conservation knowledge and practices.

SeaWorld receives feedback daily from own experts, outside experts, our conservation partners, and our patrons. Our ongoing research and mammal rehabilitation efforts continually inform our education programs and allows us to incorporate the most recent scientific information into our education program. We take pride in offering the public the best educational experience available about the animals in our collection and the natural world we live in.

Our accreditation demonstrates that we meet or exceed the AZA's and Alliance's education and conservation standards. Under the express language of the MMPA, as amplified by the statute's legislative history and as recognized by the National Marine Fisheries Service (NMFS) the federal agency that administers the MMPA for the Secretary of Commerce – see Appendix A – SeaWorld satisfies the permitting requirement that we offer “a program for education or conservation purposes that is based on professionally recognized standards of the public display community”.²

² (2)(A) A permit may be issued to take or import a marine mammal for the purpose of public display only to a person which the Secretary determines –
(i) offers a program for education or conservation purposes that is based on professionally recognized standards of the public display community;
(ii) is registered or holds a license under 7 USC 2131 et seq.; and
(iii) maintains facilities for the public display of marine mammals that are open to the public on a regularly scheduled basis and that access to such facilities is not limited or restricted other than by charging of an admission fee. 16 USC 1374 (104)(c)(2)(A)

Nationwide Study Evidencing the Efficacy of the Educational Programs of Accredited Members of the Public Display Community

Studies support the fact that accredited programs such as SeaWorld's are successful in educating the public.

AZA conducts substantial research to gain a better understanding of how visits to AZA-accredited zoos and aquariums are valued by their visitors. AZA recently partnered with the Institute of Learning Innovation and the Monterey Bay Aquarium to conduct a three-year, nationwide study that investigated the impacts zoo or aquarium visits have on conservation attitudes and understanding of visitors. The results demonstrate that these visits enhance the understanding of wildlife and the conservation of the places in the wild where animals live. Key findings include:

- Visits to accredited zoos and aquariums prompt individuals to reconsider their role in the environmental problems and conservation action, and see themselves as part of the solution.
- Visitors believe zoos and aquariums play an important role in conservation education and animal care.
- Visitors believe they experience a stronger connection to nature as a result of their visit.

The study included a follow up with some participants seven to 11 months after their visit to determine the impact over time and a significant majority of visitors were able to talk about what they learned from their earlier visit.

The results of this comprehensive study will help institutions like SeaWorld and Busch Gardens develop even more effective exhibits and educational programs that help connect people with nature and encourage changes in attitude and behavior that advance conservation.

The Rescue and Rehabilitation of JJ

SeaWorld rescued, rehabilitated and released JJ, an orphaned gray whale calf beached near Los Angeles. SeaWorld animal care specialists and veterinarians rescued her, transported her to SeaWorld and spent the first few days in the water with her keeping her moving and feeding her a formula developed especially for her by SeaWorld nutritional experts.

During JJ's rehabilitation at SeaWorld, she made remarkable progress. Within her first week, she gained 2.2 pounds per *hour* and ½ inch in length per day. From the moment of her arrival at SeaWorld, all efforts were focused on improving her physical condition and preparing her for release. JJ's time at SeaWorld allowed the public to come into contact with this magnificent animal. An educational program about gray whales, their migration, conservation status,

physiology, and other information, was displayed and educational specialists were made available to answer questions from the public.

JJ provided the scientific community with research opportunities never before imagined. Research on gray whale physiology, vocalizations, respiration and other studies by many of the world's leading experts in these fields was undertaken resulting in the publication of numerous scientific articles.

In March, 1998, SeaWorld released JJ back into the wild to join the northward migration of gray whales. JJ had grown from a frail infant weighing 1,670 pounds and measuring less than 14 feet to a healthy animal over 30 feet in length and weighing more than 18,000 pounds.

Conclusion

SeaWorld Parks & Entertainment appreciates this opportunity to share our perspective about how effective our educational and conservations programs are. We are proud of the work we do in educating the public about marine animals and the marine ecosystem and our hands-on efforts to conserve these treasured resources. Working in partnership with other zoos and aquaria, our environmental partners and the government, we are excited about the new discoveries and advances that lie ahead.

APPENDIX A

MMPA Legislative History

In 1988, Congress amended the MMPA to allow the issuance of “take” and import permits for purposes of public display on the condition that the permit holder offer “a program for education or conservation purposes that, based on professionally recognized standards of the public display community, is acceptable to the Secretary.” 16 U.S.C. § 1374(c)(2) (1988).

The House Report accompanying the Marine Mammal Protection Act Amendments of 1988 stated that Congress did not intend to grant the Secretary the authority to regulate the content of educational or conservation programs: “[I]t is the intent of the Committee that the Secretary not use this section to regulate the content of education or conservation programs.” H.R. REP. NO. 100-970, at 34 (1988), *reprinted in* 1988 U.S.C.A.N. 6154, 6175.

The Senate Committee on Commerce, Science, and Transportation similarly declared: “[t]his section is not intended . . . to require the Secretary to regulate the specific content of or methods used in education or conservation programs.” S. Rep. No. 592, 100th Cong. 2nd Sess. at 29 (1988).

In 1994 Congress amended the section in the MMPA dealing with take and import permits to clarify its original intent. Specifically the amendment clarifies the Secretary’s role regarding education by dropping the language that the professionally recognized educational standards be “acceptable to the Secretary.” The legislative history accompanying the 1994 amendments noted that standards set by the American Zoo and Aquarium Association (now the AZA) met the MMPA’s dictate regarding “professionally recognized standards”:

The committee also intends by these amendments to establish the policy that determinations made by the Secretary of Commerce with regard to education or conservation programs are limited to whether programs are based on professionally recognized standards of the public display community--such as, but not limited to, standards already in place for members of the American Zoo and Aquarium Association. The Secretary does not have the authority under this provision to establish any standards or regulations regarding education or conservation programs. This amendment to the current law is consistent with the first amendment of

the Constitution which essentially prohibits the Government from issuing 'content-based' regulations.

140 CONG. REC. H 2727 (daily ed. Apr. 26, 1994) (statement of H. Rep. Cunningham).

The 1994 legislative amendment and report, echoed prior 1988 legislative history. See the 1988 Report of the Senate Committee on Commerce, Science, and Transportation which specifically acknowledged that the standards already established by the [AZA] were to be acceptable to the Secretary: “[p]ublic display programs should be based on professionally recognized standards of the public display community, such as those of the American Association of Zoological Parks and Aquariums (AAZPA).” S. Rep. No. 100-592, at 29 (1988) (emphasis added).

At that time, the NMFS addressed the scope of the Secretary’s authority regarding educational standards. NMFS published in the Federal Register the standards submitted to it by the AZA and the Alliance. *Public Display of Marine Animals*, 59 Fed. Reg. 50,900 (October 6, 1994). NMFS wrote:

On April 30, 1994, the 1994 Amendments to the MMPA were enacted. Under the 1994 Amendments, the requirement that applicants for a permit for purposes of public display must offer an education or conservation program acceptable to the Secretary was eliminated and replaced by a requirement that, for purposes of public display, persons holding marine mammals and those issued a permit to capture or import must ‘offer a program for education or conservation purposes that is based on professionally recognized standards of the public display community.’ Essentially, although the Secretary is no longer required to determine whether education/conservation programs are acceptable, the Secretary must still determine whether a person offers a program for education or conservation purposes based on professionally recognized standards of the public display community.

59 Fed. Reg. at 50,900. NMFS went on to explain that the statutory requirement for “professionally recognized standards” is “one that relies on self-regulation.” 59 Fed. Reg. at 50,901. Additionally, NMFS specifically recognized, consistent with Congressional intent in 1988, that there is no requirement for uniform professionally recognized standards but that the AZA or Alliance standards qualify to meet the statute’s requirement: “Where applicable, the AZA or Alliance standards may be referenced by public display permit applicants and holders of

marine mammals when exercising the rights established and submitting the documentation required under the MMPA.” 59 Fed. Reg. at 50,900.

NMFS reiterated that the AZA or Alliance standards were acceptable “professionally recognized standards” under the MMPA in 2001. See *Protected Species Special Exception Permits*, 66 Fed. Reg. 35,209, 35,212 (July 3, 2001) and this determination has been reflected for years in NMFS’ instructions to apply for a permit. See http://www.nmfs.noaa.gov/pr/pdfs/permits/instructions_display.pdf (“ . . . AZA/Alliance standards may be referenced as the standards on which your education or conservation program is based.”) (note 3).

When the MMPA was last amended in 2004, the House commended the public display community for its work in educating the public concerning marine mammals:

The Committee commends the public display community for its role in the conservation and management of marine mammals. Activities sponsored by public display facilities – research, educational programs and presentations, animal husbandry, breeding, and rescue and rehabilitation – are important aspects to the conservation of marine mammals. The rescue and rehabilitation programs run by these facilities are critical to the survival of stranded animals and for many years participating institutions ran these programs using their own funds. In addition, these facilities play an invaluable role for the general public. These public display facilities are the only place for many Americans to view marine mammals and learn about the conservation needs of these animals. These facilities help generate the general public's good will toward marine mammals and develop their support for conservation and management measures for these and many other ocean creatures.

H. R. COMM. ON RESOURCES, 108th CONG., REPORT ON PRESCOTT MARINE MAMMAL STRANDING PROGRAM AMENDMENTS OF 2004 found at <http://thomas.loc.gov/cgi-bin/cpquery/T?&report=hr787&dbname=108&>.