

**THE MARINE MAMMAL PROTECTION ACT:
FOSTERING UNJUST CAPTIVITY
PRACTICES SINCE 1972**

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“There is about as much educational benefit to be gained in studying dolphins in captivity as there would be in studying mankind by only observing prisoners held in solitary confinement.”

– Jacques Cousteau

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I. INTRODUCTION

Passed in 1972, the Marine Mammal Protection Act¹ (MMPA) recognized the plight of marine mammals and sought to set appropriate management standards to safeguard their integral position in the marine ecosystem.² Dangerously near extinction or depletion, certain population stocks no longer maintain their role in the ecosystem.³ Recognizing this, Congress sought to maintain optimum population levels of species not yet depleted⁴ and to take emergency measures to mitigate immediate, severe impacts threatening depletion.⁵ Furthermore, Congress sought to ensure that appropriate resource management measures be followed to maintain marine ecosystem stability.⁶ To achieve these policy goals, the MMPA establishes a moratorium, with limited exceptions, on taking or importing marine mammals.⁷ Permits to hold a

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1. 16 U.S.C. §§ 1361-1423h (2006).

2. *See id.* § 1372. *See also id.* § 1361(2).

3. *Id.* § 1361(1). *See also* H.R. REP. NO. 92-707 (1972), *reprinted in* 1972 U.S.C.C.A.N. 4144, *cited in* Jamie M. Woolsey, *Detailed Discussion of Dolphins Under the MMPA*, ANIMAL LEGAL & HISTORICAL CTR. (2002), *available at* <http://www.animallaw.info/articles/ddusdolphins.htm#original>.

4. 16 U.S.C. § 1361(2).

5. *See id.* § 1387(g).

6. *See id.* § 1361(6).

7. *See id.* § 1371.

captive marine mammal may be granted for scientific research and public display. According to the House of Representatives, when presenting the legislation:

The effect of this set of requirements is to insist that the management of the animal populations be carried out with the interests of the animals as the prime consideration. . . . The primary objective of this management must be to maintain the health and stability of the marine ecosystem; this in turn indicates that animals must be managed for their benefit and not for the benefit of commercial exploitation.⁸

The Act underwent amendment in 1988 and again in 1994. The first amendment set further restrictions on public display permit eligibility, specifying that such permits would only be granted to public display entities wanting to exhibit the animal for an educational or conservation-oriented program that conforms to “professionally recognized standards of the public display community.”⁹ Additionally, these standards were required to be approved by the Secretaries of Commerce and Interior.¹⁰ However, these standards were not compiled or published at the time.¹¹ The 1994 amendment removed the requirement for Secretarial approval of the standards to govern the public display industry.¹² This amendment also transferred the primary authority for the care and maintenance of captive marine mammals to the Animal and Plant Health Inspection Service (APHIS).¹³ Previously, these responsibilities were shared among National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (FWS), and APHIS.¹⁴ As these standards still had not been collected, APHIS promulgated these regulations under the Animal Welfare Act.¹⁵ After negotiated rulemaking involving the public display industry, animal protection groups, veterinarians, and government managers, APHIS published the new standards for care, treatment, and transportation of captive marine mammals in 2001.¹⁶ The public display industry’s representatives included the Ameri-

8. H.R. REP. NO. 92-707, *reprinted in* 1972 U.S.C.C.A.N. 4144, 4151, 4154.

9. 16 U.S.C. § 1374(c)(2)(A)(i).

10. *See* Marine Mammal Protection Act Amendments of 1988, Pub. L. No. 100-711, 102 Stat. 4755 (1988).

11. NAOMI ROSE ET AL., *THE HUMANE SOC’Y, THE CASE AGAINST MARINE MAMMALS IN CAPTIVITY* 51 n. 5 (4th ed. 2009).

12. *See* Marine Mammal Protection Act Amendments of 1994, Pub. L. No. 103-238, 108 Stat. 532 (1994).

13. *See id.*

14. *See* Marine Mammal Protection Act of 1972, Pub. L. No. 92-522 86 Stat. (1972).

15. *See generally* 7 U.S.C. §§ 2131-2159 (2006).

16. *See generally* 9 C.F.R. §§ 3.100-118 (2012).

can Zoo and Aquarium Association (AZA)¹⁷ and the Alliance of Marine Mammal Parks and Aquariums (AMMPA).¹⁸ These industry associations represent approximately eighty percent of the marine parks, aquariums, dolphariums, zoos, and research facilities holding captive marine mammals.¹⁹ Therefore, their members are the professionals over which the standards are intended to govern.

Despite its species management and sustainable population objective, the MMPA suffers from several inherent shortcomings that ultimately impede the policy and conservation goals. These shortcomings include the industry-set standards, fractured agency responsibility, and a lack of regulation, the combination of which leads to the questionable educational value of the display industry and the promulgation of the conservation fallacy.²⁰

II. SHORTCOMINGS OF THE MARINE MAMMAL PROTECTION ACT

The first major shortcoming of MMPA that inhibits the species management it purports to achieve is the industry's control of the standards. Since public display facilities must only follow uncollected and unapproved "professionally recognized standards"²¹ for education or conservation programs, this requirement relies completely on self-regulation. By allowing the public display industry such broad control, Congress essentially quashed any future tightening of regulations that may be appropriate for conservational or animal welfare purposes. The AZA and AMMPA compiled the standards already used by their members, which became the required "professionally recognized standards"²² of the public display industry. These standards, on which the AZA and AMMPA members have built their educational and conservational programs, require that all institutions have a mission statement including education, a written education plan, and structured education programs directed by a professional with educational programming training.²³ The education programs hosted by permit-holding public display facilities must "offer multiple levels of

17. The AZA is now called the Association of Zoos and Aquariums.

18. ROSE ET AL., *supra* note 11, at 51 n.5. See also ERICH HOYT ET AL., OBSERVATIONS OF DISPARITY BETWEEN EDUCATIONAL MATERIAL RELATED TO KILLER WHALES (*ORCINUS ORCA*) DISSEMINATED BY THE PUBLIC DISPLAY INSTITUTIONS AND THE SCIENTIFIC LITERATURE 2 (1995), available at <http://www.orcanetwork.org/nathist/biennial.pdf>.

19. HOYT ET AL., *supra* note 18, at 2.

20. See ROSE ET AL., *supra* note 11, at 4.

21. 16 U.S.C. § 1374(c)(2)(A)(i) (2006).

22. *Id.*

23. ALLIANCE OF MARINE MAMMAL PARKS & AQUARIUMS, STANDARDS AND GUIDELINES 5 (2010), available at http://ammpa.org/_docs/S_GSummary2010.pdf.

learning opportunities, which include advanced education programming for all ages as well as teacher training.”²⁴ The information presented to the public about the animals, their ecosystems, or marine wildlife conservation “must be based on the best current scientific knowledge.”²⁵ Additionally, the standards require compliance with relevant government regulations, such as the rules promulgated by APHIS relating to animal care and facility special requirements.²⁶

Despite these standards being collected and published, there is little oversight to ensure compliance. The educational and conservation programs of any particular display facility are largely unregulated, allowing for a wide range of quality as well as notable disparities with the current scientific knowledge. Chairing the Congressional Subcommittee on Insular Affairs, Oceans and Wildlife Oversight hearing entitled “Marine Mammals in Captivity: What Constitutes Meaningful Public Education?,” Madeleine Z. Bordallo observed that “the [regulating] agency apparently has no process for ongoing evaluation of education and conservation programs at public display facilities to ensure that they are meeting the [mandatory] professional standards that the industry has established.”²⁷

The fractured responsibilities of regulating agencies further contribute to the regulation and oversight inadequacies of the MMPA. NMFS under the Department of Commerce protects whales, dolphins, porpoises, seals, and sea lions.²⁸ NMFS is required to maintain life history records of these marine mammals in U.S. display facilities and all foreign dolphinariums and aquaria with which they trade.²⁹ Entities under this requirement must submit their records to NMFS, to be retained and periodically updated in the *Marine Mammal Inventory Report* (MMIR).³⁰ The

24. *Id.* at 4.

25. *Id.*

26. *See id.* at 11.

27. *Subcommittee on Insular Affairs, Oceans and Wildlife Oversight Hearing on “Marine Mammals in Captivity: What Constitutes Meaningful Public Education?”*, COMM. ON NATURAL RES. (2010), <http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=181362>.

28. *See generally* 16 U.S.C. §§ 1361-1423h (2006). *See also* THE MARINE MAMMAL COMM., ANNUAL REPORT TO CONGRESS (2009) [hereinafter MMC ANN. REP.], available at <http://www.mmc.gov/reports/annual/pdf/2009annualreport.pdf>; EUGENE H. BUCK, CONG. RESEARCH SERV., RL30120, MARINE MAMMAL PROTECTION ACT: REAUTHORIZATION ISSUES (2007).

29. 16 U.S.C. § 1374(c)(10); ROSE ET AL., *supra* note 11, at 2.

30. *See* 16 U.S.C. § 1374(c)(10). For a searchable database of the complete inventory through March 24, 2010, see *Database: U.S. Marine Mammal Inventory*, SUN SENTINEL, <http://databases.sun-sentinel.com/news/broward/ftlaudMarineMammals4/> (last visited May 7, 2013). For the MMIR specifically on orcas, see JOHN KIELTY, THE ORCA PROJECT CORP., MARINE MAMMAL INVENTORY REPORT: KILLER WHALES (ORCINUS ORCA) IN CAPTIVITY

inventories “chart a history of disturbing causes of death, high mortality rates, and low birth rates.”³¹ While the public display industry argues that these mortality rates are reflective of the steep learning curve of marine mammal care,³² they are really more indicative of the animals’ inability to adapt well to captivity.³³ The Department of the Interior, through the United States Fish and Wildlife Service (FWS), maintains regulatory authority over walrus, manatees, dugongs, sea otters, and polar bears.³⁴ Unlike NMFS, the FWS is not required to maintain life history or inventory records of the species under its purview.

APHIS, under the Department of Agriculture, sets the regulatory standards for managing marine mammal captivity enclosures.³⁵ These standards address facilities and operations, such as space requirements;³⁶ health and husbandry, including water quality³⁷ and sanitation;³⁸ and transportation, as in in-transit care³⁹ and intermediate handlers.⁴⁰ Unfortunately, many of these standards are now outdated. Recognizing this in 1993, APHIS announced revision plans.⁴¹ Over eight years later, in 2001, the agency finally released some revised sections,⁴² but some important regulations still remain unchanged. Some members of the animal protection community call for APHIS’s jurisdiction to be removed or limited in favor of reestablishing NMFS and FWS as the regulation agencies.⁴³ They argue that APHIS’s expertise does not include marine species and therefore lacks the qualifica-

(2011), available at <http://theorcproject.files.wordpress.com/2011/03/mmira-deficiency-evaluation-killer-whales2.pdf>.

31. ROSE ET AL., *supra* note 11, at 2.

32. LAURENCE COUQUIAUD, EUROPEAN ASS’N FOR AQUATIC MAMMALS, AQUATIC MAMMALS: A SURVEY OF THE ENVIRONMENTS OF CETACEANS IN HUMAN CARE 283 (2005) (“Husbandry and medical care were learned empirically over the years by trainers and veterinarians. . .”).

33. This view is shared by the World Society for the Protection of Animals, the Humane Society of the United States, and numerous other organizations and researchers. See generally ROSE ET AL., *supra* note 11.

34. See 16 U.S.C. §§ 1361-1423h (2006). See also MMC ANN. REP., *supra* note 28, at 34-98; BUCK, *supra* note 28, at 4.

35. See generally Specifications for the Humane Handling, Care, Treatment, and Transportation of Marine Mammals 9 C.F.R. §§ 3.100-118 (2012).

36. *Id.* § 3.104.

37. *Id.* § 3.106.

38. *Id.* § 3.107.

39. *Id.* § 3.116.

40. See *id.* § 3.118.

41. See Standards for Marine Mammals, 58 Fed. Reg. 39,458 (July 23, 1993) (codified at 9 C.F.R. pt. 1 & 3).

42. See 9 C.F.R. §§ 3.101-118 (2012).

43. BUCK, *supra* note 28, at 17.

tions to supervise marine mammal care.⁴⁴ APHIS's poor record of proper regulation and oversight lends credence to this argument.⁴⁵ The public display industry wants to maintain APHIS as the primary captivity authority as it has more experience with animal husbandry and marine mammal maintenance than NMFS or FWS.⁴⁶ Although not a pillar of their argument, the public display industry also benefits from APHIS's lax oversight and history of avoiding citations.⁴⁷

This fractured responsibility, especially combined with the limited oversight of the public display industry's self-regulation, creates a regulatory void. Swim-with-the-dolphins (SWTD) programs offer an excellent example of this regulatory void. APHIS assumed regulatory authority over these programs in 1994 and published proposed regulations soon after.⁴⁸ However, the agency did not publish final regulations until nearly four years later,⁴⁹ allowing these interactive programs to operate without any federal regulation during this time. The final regulations released in 1998 reflected animal welfare policies by setting protective requirements for refuge areas, allowable ratios of swimmers to dolphins and staff, interaction times, etc.⁵⁰ Less than six weeks after the final regulations were published, industry opposition managed to attain the exemption for "wading programs" from these regulations until further notice.⁵¹ In 1999, an influential member of the display community funded a lobbyist to seek the

44. See *id.*; see also PATRICIA LAWSON & EUGENE H. BUCK, CONG. RESEARCH SERV., REP. 97-517 ENR, MARINE MAMMALS IN CAPTIVITY: BACKGROUND AND MANAGEMENT ISSUES IN THE UNITED STATES (1997).

45. See S. Kestin, *Regulatory System Misses Many Problems*, SUNSENTINEL, May 23, 2004, http://articles.sun-sentinel.com/2004-05-23/news/0405230050_1_marine-mammals-vet-erinary-care-marine-sciences-business; Lolita the Orca; Facts, Legal Issues and How to Get Her Home, THE ORCA PROJECT (Sept. 1, 2010), <http://theorcaproject.wordpress.com/2010/09/01/lolita-the-orca-her-life-her-legal-issues-and-her-way-home/>; *APHIS in Action... or inaction?*, THE ORCA PROJECT (Sept. 10, 2010), <http://theorcaproject.wordpress.com/2010/09/10/aphis-in-action-or-inaction/>.

46. See BUCK, *supra* note 28, at 17. See also Naomi A. Rose, Address at the European Cetacean Society 18th Annual Conference: Captive Cetaceans: The Science Behind the Ethics (Mar. 29, 2004) [hereinafter Rose Address].

47. For examples and commentary on specific cases of APHIS's lax enforcement, see *APHIS in Action... or inaction?*, *supra* note 45. For the case regarding Six Flags, see *Shouka Six Flags Killer Whale Attacks Trainer*, ANIMAL CONNECTION (July 15, 2012), <http://animalconnectionac.wordpress.com/2012/07/15/shouka-six-flags-killer-whale-attacks-trainer/>.

48. See Marine Mammals, 60 Fed. Reg. 4383 (Jan. 23, 1995) (codified at 9 C.F.R. pt. 1 & 3).

49. Specifications for the Humane Handling, Care, Treatment, and Transportation of Marine Mammals, 9 C.F.R. § 3.111 (2012), *suspended* effective Apr. 2, 1999.

50. *Id.*

51. See Swim-With-the-Dolphin Programs, 63 Fed. Reg. 55,012 (Oct. 14, 1998) (codified at 9 C.F.R. pt. 1 & 3). The exemption was based on the unanswered question of whether the standards for swimming interactions should also apply to sessions when visitors remain standing and non-buoyant. See *id.*

repeal of these regulations,⁵² which were quickly suspended.⁵³ APHIS claims to be revising the regulations, but, nearly thirteen years later, the suspension is still in place. Therefore, SWTD facilities currently operate with no federal regulation.

Despite these considerable deficiencies, the MMPA still allows exemptions for public display. The law reads, in relevant part, “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 [of Commerce] determines . . . offers a program for education or conservation purposes that is based on professionally recognized standards of the public display community.”⁵⁴ The primary justification for the public display of marine mammals is the educational benefit of these exhibits. Unfortunately, the dolpharia and aquaria’s programs are of questionable educational value,⁵⁵ a deficiency likely to continue under the current scheme.⁵⁶ Various independent studies and surveys confirm a minimal educational gain from visiting marine parks.⁵⁷ Researcher and acclaimed author Susan Davis notes both the low quality and quantity of educational content at SeaWorld’s performing dolphin shows, the parks’ main attraction:

52. Stephen Wynn, who owned the Mirage Hotel in Las Vegas in 1999, wanted to open interactive programs with the display dolphins he owned, according to a Mar. 2, 1999 article in *Washington Legal Times*, cited in ROSE ET AL., *supra* note 11, at 67-68 n.205.

53. See Swim-With-the-Dolphin Programs, 64 Fed. Reg. 15,918 (Apr. 2, 1999) (to be codified at 9 C.F.R. pt. 1 & 3).

54. 16 U.S.C. § 1374(c)(2)(A)(i) (2006).

55. See VANESSA WILLIAMS, WHALE & DOLPHIN CONSERVATION SOC’Y, CAPTIVE ORCAS ‘DYING TO ENTERTAIN YOU’: THE FULL STORY 51 (1999), available at http://www.wdcs.org/submissions_bin/orcareport.pdf (“The larger parks also claim to educate through the medium of a wide variety of glossy brochures, educational packs for schoolchildren, ‘Killer Whale Fact Sheets’ and other pamphlets. In these, as in the show commentaries, a highly selective view of orcas is presented, carefully orchestrated to present the captive situation in the best possible light and deflect any potential opposition.”).

56. ERICH HOYT, WHALE & DOLPHIN CONSERVATION SOC’Y, THE PERFORMING ORCA—WHY THE SHOW MUST STOP: AN IN-DEPTH REVIEW OF THE CAPTIVE ORCA INDUSTRY 60 (1992) [hereinafter THE PERFORMING ORCA] (“Few marine parks have made more than a pretence at education. In 1989, on the 25th anniversary of Sea World’s [sic] opening, George Millay, the father of Sea World [sic], said, ‘Sea World [sic] was created strictly as entertainment. We didn’t try to wear this false facade of educational significance.’ Millay thinks that Sea World [sic] should stick to pure entertainment. His comments were not appreciated by current Sea World executives who, following 1988 amendments [regarding] . . . programmes for education and conservation, are forced to whistle another tune.”).

57. See JOHN H. FALK ET AL., ASS’N OF ZOOS & AQUARIUMS, WHY ZOOS & AQUARIUMS MATTER: ASSESSING THE IMPACT OF A VISIT TO A ZOO OR AQUARIUM 5 (2007), available at http://www.aza.org/uploadedFiles/Education/why_zoos_matter.pdf. See generally Yixing Jiang et al., *Public Awareness, Education, and Marine Mammals in Captivity*, 11 TOURISM REV. INT’L 237 (2008), available at <http://www.mlueck.org/pdf/tri2008.pdf>; D. L. Rhoads and R. J. Goldsworthy, *The Effects of Zoo Environments On Public Attitudes Towards Endangered Wildlife*, 13 INT’L J. ENVTL. STUD. 283 (1979).

[T]he Shamu show reveals very little actual scientific or natural historical information, and discussions of research goals and discoveries are hazy. True, not much can be packed into a twenty-minute performance, but a look at what is included is revealing. The audience is asked whether Shamu is a fish or a mammal and is told that it is a mammal—but the definition of mammals, or the significance of mammalian status, or the importance of the differences between marine mammals and fish is never discussed.⁵⁸

One study examined children's comprehension of animals' adaptation, interaction with the environment, ecosystem significance, and threats to the species. Comparing their understanding after visiting a museum to that after observing live animals at zoos, researchers found that museum still-life dioramas lead to higher comprehension and appreciation.⁵⁹

As trained behaviors and exercises in showmanship, the animal performances have no relationship to natural behaviors and therefore no educational value.⁶⁰ Audiences may be entertained, but learn nothing. In fact, most marine park visitors attend for entertainment purposes over education.⁶¹ Researchers examining learning at zoos in the U.S. found that only about a third of patrons visited zoos to purposely learn about the animals on display and even fewer went with hopes of learning about conservation.⁶² Studying public awareness of marine mammals in captivity, researcher Jiang also found that more dolphinarium visitors went to the park for entertainment, such as viewing marine mammal performances, than for education.⁶³

Even public display industry leaders have acknowledged the lack of education, such as in the welcoming speech given at a conference on education by W.V. Donaldson, then president of the

58. SUSAN G. DAVIS, SPECTACULAR NATURE: CORPORATE CULTURE AND THE SEA WORLD EXPERIENCE 298 n.39 (1997).

59. Barbara Ann Birney, *Children, Animals, and Leisure Settings*, 3 SOC'Y & ANIMALS 171, (1995).

60. See Michael Lück & Yixing Jiang, *Keiko, Shamu and Friends: Educating Visitors to Marine Parks and Aquaria?*, 6 J. ECOTOURISM 127, 127-38 (2007). See also ROSE ET AL., *supra* note 11, at 3.

61. STEPHEN R. KELLERT & JULIE DUNLAP, ZOOLOGICAL SOC'Y OF PHILA., INFORMAL LEARNING AT THE ZOO: A STUDY OF ATTITUDE AND KNOWLEDGE IMPACTS 20-22 (1989) (finding that only a third of zoo visitors sought educational experiences while most attended for entertainment and recreation). See also Jiang et al., *supra* note 57, at 242.

62. See KELLERT & DUNLAP, *supra* note 61, at 21. See generally C. Wright and E. Kelsey, 18TH INT'L MARINE ANIMAL TRAINERS ASS'N CONF., AFTER THE 'SHOW': NEW DEVELOPMENTS IN THE TRAINING AND INTERPRETATION OF KILLER WHALES AT THE VANCOUVER AQUARIUM (1990) cited in Lück & Jiang, *supra* note 60, at 128.

63. See Jiang et al., *supra* note 57, at 242.

Zoological Society of Philadelphia: “[T]he overwhelming majority of our visitors leave us without increasing either their knowledge of the natural world or their empathy for it. . . . I wonder if we don’t make things worse by reinforcing the idea that man is only an observer of nature and not part of it.”⁶⁴ Nonetheless, the vast majority of marine parks intentionally exclude comprehensive, thorough educational material on all subjects, including marine mammals’ natural habitats and behaviors, social structures, biology, and roles in the marine ecosystem.⁶⁵ Not only are the depth and quality of educational information lacking, but the actual provision of materials such as brochures is also inadequate. A survey of the thirteen marine parks with captive orcas revealed just how few educational materials are provided.⁶⁶ Only six supplied any information for children; five, for teachers; three, for sale.⁶⁷ Even more telling of the parks’ priorities, ten sold photographs of the visitors with a whale and six offered the opportunity for visitors to feed orcas.⁶⁸ Not only do marine parks limit their educational materials to topical coverage by minimal means, the information is frequently biased, scientifically incorrect, or distorted.⁶⁹ Some researchers argue that the public display industry’s motive for distorting information is obvious: “The more understanding people have of the natural history and ecology of marine mammals, the more likely they are to question why marine mammals are held in captivity.”⁷⁰

The public display industry engages in miseducation, outright lying, and emotional manipulation to hide the deficiencies of their educational offerings.⁷¹ SeaWorld bans its staff from using the word “evolve” to avoid controversy or offending visitors’ religious beliefs.⁷² The scripts and performances portray aggressive behaviors in wild animals as play, such as slapping the surface

64. W. V. Donaldson, President, Zoological Soc’y of Phila., Welcome to the Conference on Informal Learning, Proceedings of the Conference on Informal Learning (1987), *cited in* MARINE WILDLIFE AND TOURISM MANAGEMENT 140 (James Higham & Michael Lück eds., 2008).

65. ROSE ET AL., *supra* note 11, at 3. *See generally* Lück & Jiang, *supra* note 60 (examining educational materials at marine parks and aquaria that house orcas).

66. Lück & Jiang, *supra* note 60, at 133–34.

67. *Id.*

68. *Id.*

69. ROSE ET AL., *supra* note 11, at 3.

70. Lück & Jiang, *supra* note 60, at 128 (citing NAOMI A. ROSE & RICHARD FARINATO, THE HUMANE SOC’Y, THE CASE AGAINST MARINE MAMMALS IN CAPTIVITY 38 (3rd ed. 1995)).

71. *See* ROSE ET AL., *supra* note 11, at 3; *see also* WILLIAMS, *supra* note 55, at 50–51.

72. A 1991 SeaWorld training manual instructs “because evolution is a controversial theory, use the word ‘adapt’.” DAVIS, *supra* note 58, at 298 n.40; *A Whale of a Business*, PBS, Nov. 1997, <http://www.pbs.org/wgbh/pages/frontline/shows/whales/seaworld/buzz.html>.

with tail or flippers, jaw snapping,⁷³ and tossing trainers through the air.⁷⁴ Not only do these shows mislead the audience, they also encourage these aggressive behaviors for which the animals are punished when they exhibit these natural behaviors off cue and cause injury.⁷⁵ Furthermore, these performances and segregated holding pools miseducate the visitors by ignoring the animals' complex social structure and need for familial bonds.⁷⁶ Dolphins and orcas develop societal relationships integral to their natural existence:

Small cetaceans are not merely gregarious; they form a complex society that is frequently based on kinship. Certain cetacean species are known to retain family bonds for life. In some populations of orcas, family ties are so persistent and well-defined that all family members are usually within a four-kilometer radius of each other at all times. Captive facilities, with their logistical constraints, commercial considerations, and space limitations, cannot provide conditions that allow natural social structures to form. In captivity, social groups are wholly artificial. Facilities mix Atlantic and Pacific stocks, unrelated animals, and, in the case of orcas, races (transient and resident), which have disparate diets, habits, and social structures.⁷⁷

The marine parks fail to acknowledge these disparities in their performance scripts and other materials disseminated to their visitors.⁷⁸

73. See Susan H. Shane, *Behavior and Ecology of the Bottlenose Dolphin at Sanibel Island, Florida*, in *THE BOTTLENOSE DOLPHIN* 245-61 (Stephen Leatherwood & Randall R. Reeves eds., 1990); see also Jan Östman, *Changes in Aggressive and Sexual Behavior Between Two Male Bottlenose Dolphins (Tursiops truncatus) in a Captive Colony*, in *DOLPHIN SOCIETIES* 305-17 (Karen Pryor & Kenneth S. Norris eds., 1990)); see also *Killer Whales: Behavior*, SEAWORLD.ORG, <http://www.seaworld.org/animal-info/info-books/killer-whale/behavior.htm> (last visited May 7, 2013) (stating that orcas "establish dominance by slapping their tails against the water, head-butting, jaw-snapping, . . . and various other vigorous postures and gestures."); ROSE ET AL., *supra* note 11, at 3-4.

74. See ROBIN W. BAIRD, *KILLER WHALES OF THE WORLD: NATURAL HISTORY AND CONSERVATION* 27 (Voyageur Press 2006).

75. See OCEANIC PRESERVATION SOC'Y, *THE DANGERS OF MARINE MAMMALS IN CAPTIVITY* (2011), available at http://thecovemovie.com/Blog_Photos_Here/marine%20mammals%20timeline.pdf; see also WHALE & DOLPHIN CONSERVATION SOC'Y, *BITING THE HAND THAT FEEDS: THE CASE AGAINST DOLPHIN PETTING POOLS* 5-6 (2003).

76. See *THE PERFORMING ORCA*, *supra* note 56, at 46-47 (comparing social structures of captive orcas with wild pods); Michael A. Bigg et al., *Social Organization and Genealogy of Resident Killer Whales (Orcinus orca) in the Coastal Waters of British Columbia and Washington State*, in 12 *REPORT OF THE INT'L WHALING COMM'N* 383 (1990).

77. ROSE ET AL., *supra* note 11, at 21-22 (footnote omitted).

78. See *id.* at 3; see also Lück & Jiang, *supra* note 60, at 128 (discussing these claims from critics of marine parks).

Display facilities create and disperse scientifically distorted or incorrect information, such as why captive orcas' dorsal fins collapse and captive versus wild life spans. Nearly all captive adult orcas have at least partially collapsed dorsal fins.⁷⁹ Most males in captivity display fully collapsed fins.⁸⁰ However, research shows that only one to five percent of wild orcas suffer from this deformity⁸¹ and only wild males have fully collapsed fins.⁸² Research suggests that ill-health and stress cause the wild orca fin collapse.⁸³ To account for the high rate of collapsed dorsal fins in their tanks, many display facilities claim that it is a genetic condition.⁸⁴ However, the wild pods from which the display whales (or the parents of captive-born individuals) were captured do not suffer from a high frequency of the deformity.⁸⁵ Therefore, “[t]he only logical conclusion is that conditions of captivity play a far greater part than . . . genetics”⁸⁶ in captive orca dorsal fin collapse.

The “Ask Shamu” feature on SeaWorld’s website shows intentional manipulation of scientific information.⁸⁷ In answering the question “Why do some killer whales’ dorsal fins flop over?” SeaWorld offers diluted, somewhat relevant “scientific” information from which real conclusions unfavorable to the corporation may be extrapolated. By only using the term “bent over,” the script downplays the deformity.⁸⁸ The website refers to an orca study that found twenty-three percent of the wild New Zealand males exhibited “bent” dorsal fins,⁸⁹ but conveniently does not mention that this included twisted, wavy, hooked, and notched—not just collapsed or even “bent”—dorsal fins.⁹⁰ SeaWorld’s website also fails to note that virtually 100% of their captive males exhibit the

79. JERYE MOONEY, WHALE & DOLPHIN CONSERVATION SOC’Y, CAPTIVE CETACEANS: A HANDBOOK FOR CAMPAIGNERS 23 (1998), [http://www.wdcs.org/submissions_bin/captivity handbook.pdf](http://www.wdcs.org/submissions_bin/captivity%20handbook.pdf); *Aquariums: The Issues*, LIBERATION BC, <http://liberationbc.org/issues/aquariums> (stating that in captivity “virtually all males and [] most females have at least partially to completely collapsed dorsal fins”).

80. MOONEY, *supra* note 79, at 23.

81. JOHN K. B. FORD ET AL., *KILLER WHALES* (University of British Columbia Press 1994).

82. *Id.* See also Robin W. Baird & Antoinette M. Gorgone, *False Killer Whale Dorsal Fin Disfigurements as a Possible Indicator of Long-Line Fishery Interactions in Hawaiian Waters*, 59 PAC. SCI. 593, 595 (2005).

83. Baird & Gorgone, *supra* note 82, at 595, 597.

84. ROSE ET AL., *supra* note 11, at 52 n.16. See also HOYT ET AL., *supra* note 18, at 10.

85. See, e.g., FORD ET AL., *supra* note 81, at 78; ROSE ET AL., *supra* note 11, at 52 n.16.

86. HOYT ET AL., *supra* note 18, at 10.

87. See *Ask Shamu: FAQ’s*, SEAWORLD.ORG, [hereinafter *Ask Shamu*] <http://www.seaworld.org/ask-shamu/faq.htm#killer-whales> (last visited May 7, 2013).

88. *Id.* See HOYT ET AL., *supra* note 18, at 10 for an example of SeaWorld’s distorting of information regarding dorsal fins.

89. *Ask Shamu*, *supra* note 87.

90. Ingrid N. Visser, *Prolific Body Scars and Collapsing Dorsal Fins on Killer Whales (Orcinus orca) in New Zealand Waters*, 24 AQUATIC MAMMALS 71, 72-77 (1998).

condition.⁹¹ Nor does it admit that none of their orcas came from New Zealand pods.⁹² Additionally, no qualifying information about the New Zealand pod study is provided—such as the year, research team, sample size, or statistical significance of the finding. The website goes on to explain that “scientists have a couple of theories” on fin collapse.⁹³ The first reason given is that submersion supports the fin, so that an orca “that spends more time at the surface, with its fin protruding out of the water, has a greater tendency for its fin to bend.”⁹⁴ However, “Shamu” does not discuss the depth of their holding tanks, which are prohibitively shallow so as to prevent diving and keep the whales near the surface. Second, the website states that “collagen [which composes dorsal fins] becomes more flexible when warmed, such as if it is exposed to sunlight.”⁹⁵ Of course, the comparative temperatures of the natural ocean habitat and of the pool water are not discussed. Temperatures at SeaWorld’s Orlando and San Antonio parks frequently reach higher than ninety degrees Fahrenheit.⁹⁶ Moreover, aerial photographs of the three Shamu Stadiums as well as visitor observations show that most of the pools have no shade, coverings, or grottos for the whales to escape the sun.⁹⁷ It is highly probable that these captive orcas endure temperatures far higher and for more extended periods than their wild counterparts. The third explanation for fin collapse is the “genetic tendency”⁹⁸ argument, as discredited above. The answer audaciously concludes with “[n]either the shape nor the droop of a whale’s dorsal fin are indicators of a killer whale’s health or well-being.”⁹⁹ This illogical conclusion is not only a false statement, but clearly fails the test of simple deductive reasoning from the arguments given.

Marine parks also promulgate scientifically incorrect information, as indicated by the vast disparity in various parks’ information on orca life spans. The scientific community accepts that wild female orcas live an average of at least fifty years; males,

91. See generally KIELTY, *supra* note 30.

92. See generally WHALE & DOLPHIN CONSERVATION SOC’Y, CAPTIVE ORCAS BY FACILITY (2011) [hereinafter WDCS], http://www.wdcs.org/submissions_bin/orcas_in_captivity_facilities_march2011.pdf (noting where each orca in Sea World’s possession as of 2011 originated).

93. Ask *Shamu*, *supra* note 87.

94. *Id.*

95. *Id.*

96. See *Monthly Averages for Orlando*, THE WEATHER CHANNEL, <http://www.weather.com/weather/wxclimatology/monthly/graph/USFL0372> (last visited May 7, 2013); *Monthly Average for San Antonio*, THE WEATHER CHANNEL, <http://www.weather.com/weather/wxclimatology/monthly/graph/USTX1200> (last visited May 7, 2013).

97. See *Current Facilities Holding Orcas*, ORCA FREAK, <http://www.freewebs.com/orcafreak/facilities.htm> (last visited May 7, 2013).

98. ROSE ET AL., *supra* note 11, at 52 n.16. See also HOYT ET AL., *supra* note 18, at 10.

99. Ask *Shamu*, *supra* note 87.

thirty.¹⁰⁰ The estimated maximum life span of wild orcas is eighty to ninety for females and roughly sixty for males.¹⁰¹ In captivity, the average captive-born orca survives for only four and a half years; wild-caught, four years.¹⁰² The longest living captive orcas are two forty-one-year-old females.¹⁰³ SeaWorld's Killer Whale Animal InfoBook claims, "[n]o one knows for sure how long killer whales live,"¹⁰⁴ and that orcas in certain populations live "at least" thirty-five years.¹⁰⁵ Furthermore, it states that "scientists *believe* that if a killer whale survives the first six months, a female's life expectancy is 50 years and a male's is 30 years,"¹⁰⁶ intentionally disregarding the fact that these are the average ages and not the maximum ages. This also discredits that this statement is accepted as factual by the scientific community but instead is merely a belief. SeaWorld shares culpability for this prolonged lie with other members of the public display industry. A study of all parks holding at least one orca in the United States and Canada asked how long orcas live, and their responses were compared to the most recent scientific literature.¹⁰⁷ Five of the parks responded to the survey inquiries, and their answers are telling. Miami Seaquarium and SeaWorld reported that the longevity of orcas is twenty-five to thirty-five years; Marineland of Ontario, "up to 35 years;" Marine World Africa USA, fifty to seventy-five years; and Vancouver Aquarium, seventy to eighty years for females and fifty years for males.¹⁰⁸ Researchers concluded that "[a]ll educational material derived from the four Sea World marine parks, Marine-

100. Peter F. Olesiuk et al., *Life History and Population Dynamics of Resident Killer Whales (Orcinus orca) in the Coastal Waters of British Columbia and Washington State* in 12 REP. INT'L WHALING COMMISSION 209 (P.S. Hammond et al. eds., 1990); John K. B. Ford, *Killer Whale, Orcinus orca* in ENCYCLOPEDIA OF MARINE MAMMALS 650-56 (W. F. Perrin et al. eds., 2002). These publications are considered the definitive sources for life history information on this species.

101. Ford, *supra* note 100, at 650. For a discussion of the ongoing photo-identification study that has tracked individually identified orcas for over 30 years, see Peter F. Olesiuk, et al., *Life History and Population Dynamics of Northern Resident Killer Whales (Orcinus orca) in British Columbia*, FISHERIES AND OCEANS CANADA 33 (2005), http://www.dfo-mpo.gc.ca/CSAS/Csas/DocREC/2005/RES2005_045_e.pdf (noting, *inter alia*, "[i]t has become clear that killer whales can live much longer than the 25-30 years suggested by annuli in teeth . . . or survival rates of captive animals").

102. WHALE & DOLPHIN CONSERVATION SOC'Y, CAPTIVE ORCA STATISTICS (2011), *available* at http://www.wdcs.org/submissions_bin/captive_orca_statistics_march2011.pdf.

103. WDCS, *supra* note 92 (Lolita, captive at the Miami Seaquarium, and Corky II, captive at SeaWorld San Diego).

104. *Killer Whales: Longevity & Causes of Death*, SEAWORLD.ORG, <http://seaworld.org/animal-info/info-books/killer-whale/longevity.htm> (last visited May 7, 2013).

105. *Id.*

106. *Id.* (emphasis added).

107. See generally HOYT ET AL., *supra* note 18 (discussing survey of marine parks knowledge of, *inter alia*, orca lifespan).

108. *Id.* at 4-6.

land of Ontario, and the Miami Seaquarium contained longevity information that significantly and consistently contradicted recent scientific literature.”¹⁰⁹

Some marine parks have even been known to engage in outright lying. The Indianapolis Zoo’s website reported the average life span of wild bottlenose dolphins as thirty-seven years until a newspaper noted that none of the zoo’s captive dolphins lived past twenty-one years.¹¹⁰ Instead of using the opportunity to educate the public about the challenges of captive marine mammals, by which the zoo could have promoted its successes, their response was to change the website to say that wild dolphins live only seventeen years on average.¹¹¹

Consistent with the practice of not providing accurate educational information, the dolphin and orca shows are grand-scale exercises in emotional manipulation designed to distract visitors from the cruelties of captivity and the learning void.¹¹² These shows demonstrate trained behaviors and capitalize on the facade of emotional connection between the animals and their trainers.¹¹³ They portray the cetaceans as jovially subservient: trainers pet their heads and noses like domesticated house pets, play follow-the-leader and monkey-see-monkey-do, and ride their backs, noses, and even stomachs.¹¹⁴ Whale and dolphin shows rely on anthropomorphized waving of flippers and impressive jumps choreographed to specially-composed music.¹¹⁵ The parks strive to provide an entertaining show or create a sense of wonder at the seemingly

109. *Id.* at 1.

110. Sally Kestin, *What Marine Attractions Say vs. the Official Record*, S. FLA. SUN-SENTINEL, May 24, 2004.

111. *Id.*

112. See ROSE ET AL., *supra* note 11, at 3; see also D. Schwab, *Interact with the Dolphins*, BEACH & BAY PRESS, Dec. 14, 1995, at 1, 5-6 (finding that visitors are mostly attracted to the performances and petting pools), *cited in* Lück & Jiang, *supra* note 60, at 127; THE PERFORMING ORCA, *supra* note 56, at 60.

113. THE PERFORMING ORCA, *supra* note 56, at 61 (“[T]he images that persist are those of the trainers riding, kissing, hugging, patting and flying off the heads of orcas as trained animals are put through their paces of ‘the wettest show on Earth’. [sic] To some, the orca comes off as a cuddly, inflatable caricature, like the lovable toothed monsters of children’s books, as emphasized by the kiss awarded in some shows by a trainer or even a young member of the audience.”). See also ROSE ET AL., *supra* note 11, at 3.

114. THE PERFORMING ORCA, *supra* note 56, at 29, 61; WILLIAMS, *supra* note 55, at 68 (describing a 1991 SeaWorld advertisement that displays a child sitting on one of the park’s orcas with the caption “[e]very great American theme park has an unforgettable ride! . . . [W]hen it comes to memorable experiences, perhaps nothing compares with sitting on the back of a killer whale”).

115. For more information about SeaWorld’s current orca show, “One Ocean,” see *One Ocean*, SEAWORLD PARKS, <http://seaworldparks.com/en/seaworld-orlando/attractions/shows/one-ocean> (last visited May 7, 2013).

chummy relationship shared by the animals and trainers.¹¹⁶ The perky trainers encouraging stadium-wide hand-clapping suggest that the marine mammals enjoy performing, instead of the fact that they are literally working for their food and social interaction.¹¹⁷ Audiences misinterpret the dolphins' natural curve at the corners of their mouth for smiles.¹¹⁸ After the grand finale of a triple-coordinated jump, visitors leave the stadium entertained and incognizant of the cruelties behind the series of learned behaviors strung together.¹¹⁹

The public display industry's rhetoric, distortion, and emotional manipulation facilitate desensitization—falling short of the goals of the MMPA. Nonetheless, the industry insists its educational programs are sufficient: after all, they clearly meet the “professionally recognized standards” required by the MMPA. Avowing their educational benefits and effectiveness, these facilities “frequently cite annual attendance figures, apparently convinced that visitors learn about marine mammals simply by walking through a turnstile.”¹²⁰ The real effects on their visitors' education and mindset towards captive animals are dismal as people become desensitized to the cruelty of captivity. Studying the impact of zoo visits on public attitudes, researchers found less concern for the right and wrong treatment of animals after being exposed to captive animal exhibits.¹²¹ Another study found that marine park visitors “were more likely to agree with the notion

116. See Jeffery Wright, *So Wrong, But Thanks for All the Fish: A SeaWorld Ethics Primer*, SAN ANTONIO CURRENT (Apr. 14, 2010), <http://www2.sacurrent.com/news/story.asp?id=71101>; WILLIAMS, *supra* note 55, at 5 (describing “‘Playtime with the whales’”).

117. Some marine parks, including Sealand and SeaWorld, have been known to withhold food from display orcas and dolphins. After resigning over management disagreements, former Sealand trainer Eric Walters admitted:

some marine mammals including seals, sea lions and orcas were kept in a permanently “hungry” state at Sealand or deprived of food if they did not perform or cooperate. . . . “If the killer whales did not enter the module pool [a small, dark, metal holding pool about 20 feet (6 m) deep and 26 feet (8 m) in diameter] at the end of the day to spend the night, we, as trainers, were instructed to withhold their end-of-the-day allotted food. This was usually at least 25 to 35 percent of their daily food intake.

THE PERFORMING ORCA, *supra* note 56, at 35. A former SeaWorld trainer reported that food is sometimes withheld from orcas and dolphins who do not perform cooperatively. *Id.* “They would only be given their ‘base’ including vitamins—about 2/3 of their daily food allotment. ‘Usually the whales would start performing when they realized they weren’t going to get fed.’” *Id.*

118. CHRIS CATTON, DOLPHINS 128 (1995), (“[W]ith their energy, their playfulness, and their apparent sense of fun, [dolphins] convince us that they are happy to see us, even if we know that in truth the quizzical fixed smile is just a result of the unusual shape of the dolphin’s jawline.”). See also ROSE ET AL., *supra* note 11, at 24 (“The dolphin’s perpetual smile is often taken as a sign of contentment; in truth, it is just an anatomical characteristic that has no relation to health or emotional state.”).

119. See LAWSON & BUCK, *supra* note 44.

120. ROSE ET AL., *supra* note 11, at 4.

121. See KELLERT & DUNLAP, *supra* note 61, at 77, 82.

that humans were created to rule over the rest of nature.”¹²² The public display industry strives to achieve this desensitization. For example, marine park staff refers to the marine mammals’ pool as a “habitat,”¹²³ intentionally avoiding any term that would suggest that the pools, tanks, and cages are insufficient, but instead, easily comparable to their natural environment. A park brochure even went so far as to claim, “SeaWorld is committed to maintaining the largest and most sophisticated marine mammal habitats in the world.”¹²⁴ Clearly false propaganda, this statement is indicative of the industry’s goal to deceive and desensitize its visitors.¹²⁵

III. THE CONSERVATION FALLACY

The exception in the MMPA allowing display facilities to maintain captive marine mammals requires that those facilities, among other things, offer “a program for education *or conservation* purposes that is based on professionally recognized standards of the public display community.”¹²⁶ However, marine parks do not promote conservation attitudes or behaviors in their visitors. Repeated independent studies show most U.S. public display facilities do not contribute even moderately to conservation efforts or education.¹²⁷ Nonetheless, their constant marketing and public

122. Jiang et al., *supra* note 57, at 246.

123. See HOYT ET AL., *supra* note 18, at 11-12. Zoos, aquariums, and dolphinariums are frequently accused of knowingly and deliberately misleading the public:

The language of the promoter is always suspect, often disingenuous. The word “habitat,” for example, has replaced “cage.” People hear about zoos building new habitats and putting animals from their collections into the new habitats, and draw the wrong conclusions when they hear zoos also openly boast that they are arks destined to save the earth’s wildlife.

Id. at 12 (quoting David Hancocks, *Lions and Tigers and Bears, Oh No! in ETHICS ON THE ARK* (B. G. Norton et al. eds., 1995)).

124. HOYT ET AL., *supra* note 18, at 11 (quoting SEAWORLD PARKS, *THE REAL STORY ON KILLER WHALES* (1993)).

125. Erich Hoyt, Senior Research Fellow with the Whale and Dolphin Conservation in the United Kingdom, notes:

Far from educating people about habitats, the promotional literature from some marine parks undermines the meaning of the word. . . .

. . . .

Such promotional hyperbole has a way of seeping into and corrupting the vernacular language. . . . Such a message is, in effect, an anti-conservation message, contradicting scientific uses of the word and the professionally recognized standards of the public display community . . .

Id. at 12.

126. 16 U.S.C. § 1374(c)(2)(A)(i) (2006) (emphasis added).

127. See Tammie Bettinger & Hugh Quinn, *Conservation Funds: How Do Zoos and Aquariums Decide Which Projects to Fund?*, in AMERICAN ZOO & AQUARIUM ASSOCIATION ANNUAL CONFERENCE PROCEEDINGS 88 (2000) (discussing results of a survey on American Zoo and Aquarium members regarding money put towards conservation efforts); Andrew Tribe & Rosemary Booth, *Assessing the Role of Zoos in Wildlife Conservation*, 8 HUMAN DIMENSIONS WILDLIFE, 65-74 (2003). For a discussion of a public display facility’s successful conservation and education efforts, see J. D. Kelly, *Effective Conservation in the Twenty-*

relation campaigns promote the illusion of the public display industry as the “modern ark.”¹²⁸

These parks do not promote conservation-friendly attitudes or behaviors in their visitors. Recognizing that they had not assessed their impact on visitors, the AZA conducted a nationwide study to assess the parks’ impacts on guests about conservation.¹²⁹ The results showed a dismal effect of captive animal exhibits on visitors’ conservation knowledge and behaviors. The study concluded, *inter alia*, that only ten percent of visitors learned more about conservation and forty six percent felt compelled to change to more conservation-oriented behaviors.¹³⁰ Unfortunately, the AZA did not address whether visitors actually did modify their behaviors.¹³¹ Some parks make no attempt to even disseminate information on conservation to visitors. In a study on the education and conservation efforts by marine mammal parks exhibiting orcas, less than half provided any information on conservation.¹³²

Public display facilities do not play a meaningful role in conservation efforts. Based on a 1999 study, AZA member facilities, on average, only spent a 0.1% of their operating budgets on conservation projects—both zoo- and field-based.¹³³ In 2007, the SeaWorld and Busch Gardens Conservation Fund (Fund) made its largest ever donation to conservation projects—\$1.3 million.¹³⁴ However, that amount was less than one percent of SeaWorld Orlando’s revenue that year alone.¹³⁵ The Orlando park generates over \$250 million per year in admission fees, plus additional millions of revenue dollars from merchandise, food, and drink sales.¹³⁶ SeaWorld San Antonio collects around \$90 million in

First Century: The Need to be More Than a Zoo, 35 INTERNATIONAL ZOO YEARBOOK, 1 (1997), at 1–14.

128. ROSE ET AL., *supra* note 11, at 4. See also WHALE & DOLPHIN CONSERVATION SOC’Y, WHALE & DOLPHIN SHOWS & INTERACTION PROGRAMMES, http://www.wdcs.org/submissions_bin/Introduction_to_Captivity.pdf (last visited May 7, 2013) (“It is never going to be a solution to the growing number of threats dolphins face to try to preserve them in the ‘ark’ of dolphinariums (and no legitimate zoological facilities promote the ‘ark’ theory for zoos and aquariums anymore either). If people think that captivity IS a solution to habitat threats the focus is then taken away from reducing the threats to wild dolphins. . . . If people believe that it’s better for dolphins to be in a cage rather than in the wide open ocean, this only emphasizes how dolphinariums miseducate the public.”).

129. FALK ET AL., *supra* note 57, at 3.

130. *Id.* at 9, 11.

131. See generally *id.*

132. Lück & Jiang, *supra* note 60, at 134.

133. See BETTINGER & QUINN, *supra* note 127, at 89.

134. *SeaWorld & Busch Gardens Conservation Fund Awards a Record \$1.3 Million*, SEAWORLD.ORG (Apr. 13, 2007), <http://www.seaworld.org/whats-new/znn/2007/april/fund-awards-record.htm> [hereinafter *SeaWorld 2007 Donation*].

135. ROSE ET AL., *supra* note 11, at 53-54 n.34 (citing figures retrieved from www.amusementbusiness.com, prior to its closing in 2006).

136. *Id.*

admission fees alone.¹³⁷ Therefore, the mere \$1.3 million donation for conservation projects is roughly half of a percent of Orlando admission fee revenue and 1.4% of San Antonio admission fees. These figures do not take into account the revenue from other Anheuser-Busch facilities, such as SeaWorld San Diego, Busch Gardens, and Discovery Cove, as these numbers are not readily available.¹³⁸

Adding to this disenchantment, the Fund divides the donations among over 100 conservations projects—not just marine mammal projects—including Kenyan wild dog research, tropical fish for home aquariums, big cats research, and coastal restoration programs.¹³⁹ The marine mammal programs required by the MMPA are interspersed with the copious other programs spread across more than sixty countries.¹⁴⁰ If the Fund divided the 2007's record donation of \$1.3 million evenly across all of the programs, less than \$12,000 went to marine mammals. This makes the donation flatly unimpressive, especially considering the fact that SeaWorld has paid as much as \$130,000 for a single bottlenose dolphin¹⁴¹ and about \$1 million for an orca¹⁴²—this reflects only the price of the animal and does not include shipping, care, feeding, facility expenses, etc.

For an aquarium, dolphinarium, or zoo to meaningfully contribute to conservation, the facility should dedicate at least ten percent of its operating income to conservation and research.¹⁴³

137. W. Scott Bailey, *SeaWorld GM Says the Local Park is Making a Big Splash*, SAN ANTONIO BUSINESS JOURNAL (Aug. 31, 2008), <http://www.bizjournals.com/sanantonio/stories/2008/09/01/story2.html?page=all>.

138. ROSE ET AL., *supra* note 11, at 53-54 n.34.

139. For the 2007 donation, see *SeaWorld 2007 Donation*, *supra* note 134 (stating that the donation was distributed among “112 environmental and research organizations worldwide”). For more recent donations, see *SeaWorld and Busch Gardens Grant More than \$1 Million to Protect Animals in Need*, SEAWORLD BUSCH GARDENS CONSERVATION FUND (June 30, 2011), <http://www.swbg-conservationfund.org/NewsEventsArticle.aspx?articleID=688> [hereinafter SEAWORLD CONSERVATION FUND] (stating “[t]he Fund approved grants to more than 100 wildlife protection projects”); *SeaWorld & Busch Gardens Conservation Fund Grants More than \$1.1 Million to Support Wildlife Research and Conservation*, SEAWORLD BUSCH GARDENS CONSERVATION FUND (Aug. 2012), <http://www.swbg-conservationfund.org/NewsEventsArticle.aspx?articleID=690> (stating “[t]he Fund approved grants to 88 wildlife research and conservation projects”).

140. SEAWORLD CONSERVATION FUND, *supra* note 139.

141. Sally Kestin, *Captive Mammals Can Net Big Profits for Exhibitors*, SUN-SENTINEL (May 18, 2004), <http://www.sun-sentinel.com/sfl-dolphins-moneydec31,0,5205099,full.story> (stating that SeaWorld bought nine bottlenose dolphins in 2002 for \$130,000 each according to the senior vice president of zoological operations for Busch Entertainment Corporation, SeaWorld's parent company).

142. Nina Easton, *The Death of Marineland: When Orky and Corky Moved to Sea World, It Meant the Whale Show Could Go On. For Marineland, the Show Is Over*, L.A. TIMES (Aug. 9, 1987), http://articles.latimes.com/1987-08-09/magazine/tm-463_1_killer-whales/2.

143. JOHN E. FA, STEPHAN M. FUNK & DONNAMARIE O'CONNELL, ZOO CONSERVATION BIOLOGY 75 (2011) (citing Kelly, *supra* note 127, at 10).

A shining example of a zoo that actually makes a serious contribution to conservation is the Jersey Zoo in the United Kingdom's Channel Islands.¹⁴⁴ It spends twenty-three percent of its gross income on conservation, which is "approximately 100 times the relative contribution of SeaWorld."¹⁴⁵ Unfortunately, such altruistic giving is not common among U.S. aquariums and marine parks. By the AZA's own count, only thirty-one of their 241 members (under 13%) made noteworthy contributions towards conservation in 2011, as measured by the percentage of their budget spent on conservation initiatives.¹⁴⁶

Obviously aware of its deficiencies, the public display industry emphasizes its participation in other kinds of conservation programs, vigorously promoting themselves as "modern arks."¹⁴⁷ These conservation attempts include research, stranding programs, and species enhancement. The research conducted at public display facilities has minimal significance,¹⁴⁸ as evidenced by the few published research papers that rely on captive subjects.¹⁴⁹ For example, at the Society for Marine Mammalogy's Seventeenth Biennial Conference on the Biology of Marine Mammals, only twenty-nine of the 571 submitted cetacean study abstracts involved research subjects in naval or private research facilities, dolphinaria, or aquaria.¹⁵⁰

Stranding programs consist of the rescue, rehabilitation, and eventual release of injured, wild marine mammals. While there are some genuine programs carrying out conservation goals, most are not in the United States, nor associated with public display facilities.¹⁵¹ One such organization is the United Kingdom Sea Life Centre, which "takes pains to rehabilitate stranded young seals, teaching them to forage for live fish, while minimizing direct exposure to humans."¹⁵² When the rehabilitated seals are ready to live independently, they are released into the wild near where

144. Tribe & Booth, *supra* note 127, at 67.

145. *Id.* at 70; ROSE ET AL., *supra* note 11, at 54 n.34.

146. *Zoo and Aquarium Field Conservation*, ASS'N OF ZOOS & AQUARIUMS, <http://www.aza.org/annual-report-on-conservation-and-science/> (last visited June 10, 2013).

147. *See* Hancocks, *supra* note 123; *see generally* Ralph R. Acampora, *Zoos: Modern Arks?*, THE ENCYCLOPEDIA OF EARTH, (Jan. 14, 2008, 5:39 PM), http://www.eoearth.org/article/Zoos:_Modern_Arks.

148. SUE MAYER, WHALE & DOLPHIN CONSERVATION SOC'Y, A REVIEW OF THE SCIENTIFIC JUSTIFICATIONS FOR MAINTAINING CETACEANS IN CAPTIVITY 4 (1998), http://www.wdcs.org/submissions_bin/capmayerscijustifications.pdf.

149. ROSE ET AL., *supra* note 11, at 15, 62 nn.134, 135. For a discussion of the debate over captive versus wild studies, *see* David Grimm, *Are Dolphins Too Smart for Captivity?*, 332 SCI. 526 (Apr. 29, 2011).

150. ROSE ET AL., *supra* note 11, at 62 n.135.

151. *Id.*

152. *Id.*

they were originally found.¹⁵³ The American public display industry's stranding programs do not follow such conservation-friendly policies. Instead, most are driven by a desire to attain inexpensive display animals, a public relations ploy, and the opportunity to continue espousing misinformation.¹⁵⁴ Facilities that rescue an injured cetacean assume responsibility of nursing it back to health, rehabilitating any physical injuries it endured, and issuing a clean bill of health.¹⁵⁵ However, given the lack of federal regulation and the lax professionally recognized standards, rehabilitated animals may be kept indefinitely in captivity.¹⁵⁶ The facility simply never approves its release. Essentially, rescuing cetaceans is treated as bargain shopping for future display animals.¹⁵⁷ This also allows for the disquieting practice of basing rescues on the desirability and rarity of the individual for display.¹⁵⁸ Even if the facility spends more on rehabilitative care than it would have by buying the animal outright, the facility's extra expenses buy an altruistic image in the public eye. This public relations ploy is well worth the expense. Additionally, the public display community capitalizes on strandings "as proof that marine mammals' natural habitat is a dangerous place full of human-caused and natural hazards. The public receives a skewed picture [that] animal's natural environment is hostile and captivity is a benign alternative, a picture . . . implicitly contrary to both conservation and welfare principles."¹⁵⁹

Many public display facilities argue that their species enhancement programs qualify as conservational programs.¹⁶⁰ The World Conservation Union (IUCN) and other world conservation bodies define "species enhancement" as breeding endangered species in captivity to one day supplement the wild population.¹⁶¹

153. For more information regarding the Sea Life Centre's seal rescue program, see *Seal Rescue*, SEA LIFE SANCTUARY, <http://www.visitsealife.com/Scarborough/protect-our-seas/seal-rescue.aspx> (last visited June 6, 2013).

154. See Lück & Jiang, *supra* note 60, at 128 ("[O]ften education is just an exercise in public relations."); THE PERFORMING ORCA, *supra* note 56, at 61 ("Many marine parks still make no more than a feeble educational effort, and visitors leave with false or misleading information."); LAWSON & BUCK, *supra* note 44 ("[Animal protection groups] view the display of marine mammals as counter-educational, because it presents a distorted view of these animals. The public sees animal behavior that is not characteristic of what these animals would display in the wild.")

155. ROSE ET AL., *supra* note 11, at 13.

156. MOONEY, *supra* note 79, at 62-63.

157. ROSE ET AL., *supra* note 11, at 13.

158. *Id.*

159. *Id.*

160. See Marcia Hope Ames, *Saving Some Cetaceans May Require Breeding in Captivity*, 41 BIOSCIENCE 746 (1991). See also MAYER, *supra* note 148, at 25-29.

161. See MARGARET KLINOWSKA, DOLPHINS, PORPOISES AND WHALES OF THE WORLD: THE IUCN RED DATA BOOK (1991); INT'L UNION FOR CONSERVATION OF NATURE, CAPTIVE BREEDING, IUCN POLICY STATEMENT (1987). See also Noel F. R. Snyder et al., *Limitations of*

Experts emphasize that this practice should only be used as a last resort to save a species from extinction, not as a long-term solution.¹⁶² Furthermore, “it should not displace habitat or ecosystem protection nor should it be invoked in absence of comprehensive efforts to maintain or restore populations in wild habitats.”¹⁶³ Virtually no such efforts are being made in U.S. display facilities’ supposed conservation programs.¹⁶⁴

Several problems accompany the marine parks’ claim that species enhancement qualifies as conservation programs. First, the species that these facilities are breeding—mainly orcas and bottlenose dolphins—are not endangered or threatened.¹⁶⁵ As acclaimed cetacean researcher Erich Hoyt notes, “neither orcas nor bottlenose dolphins—the captive-breeding successes that have received most of the attention as well as the veterinary expertise and financial backing—are reduced to levels that would normally justify an early start to captive breeding.”¹⁶⁶ Thus, by the definition of species enhancement internationally accepted by the conservation community, these are not species enhancement programs.¹⁶⁷ Second, these facilities do not have enough sexually mature individuals to maintain genetic diversity necessary for breeding sustainable populations.¹⁶⁸ Third, U.S. facilities have never re-

Captive Breeding in Endangered Species Recovery, 10 CONSERVATION BIOLOGY 338 (1996); ROSE ET AL., *supra* note 11, at 10.

162. See Snyder et al., *supra* note 161, at 338 (“Captive breeding [for species enhancement] should be viewed as a last resort in species recovery and not a prophylactic or long-term solution because of the inexorable genetic and phenotypic changes that occur in captive environments.”).

163. *Id.* at 341.

164. ROSE ET AL., *supra* note 11, at 10. Cetacean researcher Erich Hoyt examines the practice of “species enhancement,” or “captive breeding” programs, noting :

Sea World’s [sic] definition of ‘captive breeding,’ at least for orcas and bottlenose dolphins, is not the same as that used by the IUCN and other world conservation bodies—because the corporation apparently has no intention of re-introducing species to the wild. Among other things, Pacific and Atlantic orcas have been allowed to interbreed without thought of reintroduction. Yet, in principle, Sea World’s captive breeding programme will mean little for conservation and the future of orcas without a companion programme to learn how to reintroduce them to the wild. Because orcas live in pods or extended family groups, a number of related orcas of prime ages and in prime condition might need to be released at the same time.

THE PERFORMING ORCA, *supra* note 56, at 59.

165. For more information, see *Species Reports*, U.S. FISH & WILDLIFE SERV., http://ecos.fws.gov/tess_public/SpeciesReport.do?groups=A&listingType=L&mapstatus=1 (last visited May 7, 2013) and *Orcinus Orca*, THE IUCN RED LIST OF THREATENED SPECIES, <http://www.iucnredlist.org/details/15421/0> (last visited May 7, 2013) and *Tursiops Truncatus*, THE IUCN RED LIST OF THREATENED SPECIES, <http://www.iucnredlist.org/details/22563/0> (last visited May 7, 2013).

166. THE PERFORMING ORCA, *supra* note 56, at 58.

167. See KLINOWSKA, *supra* note 161.

168. MAYER, *supra* note 148, at 26-27.

leased their captive-bred orcas¹⁶⁹ or dolphins.¹⁷⁰ The public display industry has “consistently maintained that wild-caught cetaceans held in long-term captivity, let alone captive-bred progeny, cannot be rehabilitated and returned to the wild. Husbandry and training methods and the constant exposure of the animals to humans lessen animals’ chances of being released—a self-fulfilling prophecy.”¹⁷¹ In order to supplement the wild population, the purpose of species enhancement, the animals obviously must be released into the wild.¹⁷² The scientific community doubts captive-born cetaceans’ ability to succeed in the wild if released,¹⁷³ as this process has been largely unsuccessful for other species.¹⁷⁴ Captivity ill-equips cetaceans born into it. The released dolphins and orcas lack the wild-taught behaviors impossible to learn at a facility. These include the ability to forage, avoid predators, and interact with wild animals even of the same species.¹⁷⁵ Ironically, the problems faced by captive-born, released animals are not attributable to the public display facilities’ alleged enhancement programs, from which their captive-born animals are never released.

The industry’s supposed species enhancement programs are only thinly veiled attempts to breed replacement show or trade animals. Instead of endangered species, the industry focuses its

169. WDCS, *supra* note 92. See also WILLIAMS, *supra* note 55, at 57 (“[N]o captive-bred orcas have been liberated and, to date, marine parks have not shown any interest in a release project.”).

170. An extensive study in 2009 only revealed six captive-bred bottlenose dolphins released by the public display industry, four in Australia and two in Israel. ROSE ET AL., *supra* note 11, at 12, 59 nn. 106, 107. See Nick Gales and Kelly Waples, *The Rehabilitation and Release of Bottlenose Dolphins From Atlantis Marine Park, Western Australia*, 19 AQUATIC MAMMALS 49 (1993) (discussing the release of dolphins from a marine park in Australia in 1991); *The Release of Shandy and Pashosh*, DOLPHIN REEF, <http://www.dolphinreef.co.il/Default.aspx?tabid=63> (last visited May 7, 2013).

171. ROSE ET AL., *supra* note 11, at 11. For more information on the AZA’s position on releasing captive-bred marine mammals, see *Frequently Asked Questions: Is It Safe to Release Whales and Dolphins to the Wild that Now Live in Zoological Parks and Aquariums?*, ALLIANCE OF MARINE MAMMAL PARKS & AQUARIUMS, <http://www.ammpa.org/faqs.html#10> (last visited May 7, 2013).

172. INT’L UNION FOR CONSERVATION OF NATURE, IUCN/SSC GUIDELINES FOR RE-INTRODUCTIONS (1995), http://intranet.iucn.org/webfiles/doc/SSC/SSCwebsite/Policy_statements/Reintroduction_guidelines.pdf. See also CAPTIVE BREEDING, *supra* note 161, at 27-28.

173. David Dudgeon, *Last Chance to See ... Ex Situ Conservation and the Fate of the Baiji*, 15 AQUATIC CONSERVATION 105, 107 (2005) (“There are good reasons why captive breeding in a dolphinarium is no substitute for *ex situ* conservation in a reserve. . . . there is no evidence that captive-bred cetaceans can be released to the wild.”).

174. Benjamin B. Beck et al., *Reintroduction of Captive-Born Animals*, in CREATIVE CONSERVATION: INTERACTIVE MANAGEMENT OF WILD AND CAPTIVE ANIMALS 265, 278 (P. J. S. Olney et al. eds., 1994), describing a survey of 145 non-cetacean, captive-bred, endangered species releases of which only eleven percent were successful.

175. Snyder et al., *supra* note 161, at 340.

breeding on expensive species.¹⁷⁶ Their fallacies in their argument and their true intentions are clear:

As the capture and import of animals have become problematic from economic, logistical, and image standpoints, dolphinaria and aquaria have made captive breeding a central objective. However, if captive dolphin facilities were serious about trying to conserve the species that they possess, they would be focusing on protecting the habitats of wild populations and would actively be trying to ensure that their captive-bred animals could be reintroduced, and survive, in the wild.¹⁷⁷

The public display industry neither offers meaningful conservation programs nor engages in true conservation behaviors. Self-regulation allows the industry to escape accountability. These facilities hide behind massive public relations budgets, their self-proclaimed benevolence, and false claims.¹⁷⁸ The lax conditions placed on the industry's exception in the MMPA condone and even encourage the conspiracy and cruelties of captivity. Although the Act's requirements need amending and tightening, that alone will not end the pattern of injustice. As holding marine mammals captive presents other severe problems, additional measures need to be taken.

VI. INHERENT PROBLEMS WITH THE CURRENT SYSTEM OF CAPTIVITY

Holding marine mammals presents serious dangers to both the animals and the humans with which they interact. Captive orcas have killed four people since 1991.¹⁷⁹ Dozens of other people have nearly died in the past forty years and even more have sustained serious injuries, including lacerations, puncture wounds, broken bones and necks, ruptured kidneys, liver lacerations, and "permanent loss of head movement."¹⁸⁰ A 2008 marine mammal survey, commissioned by the U.S. Marine Mammal Commission, found that more than half of marine mammal workers have been

176. WILLIAMS, *supra* note 55, at 56-62.

177. ROSE ET AL., *supra* note 11, at 10.

178. *Id.* at 4-5.

179. Donna Leinwand, *Trainers Attacked: Deaths, Close Calls at Animal Parks*, USA TODAY (Apr. 15, 2010, 2:47 AM), http://www.usatoday.com/news/nation/2010-04-14-animal-attacks_N.htm?loc=interstitialskip.

180. OCEANIC PRESERVATION SOC'Y, *supra* note 75.

injured by the animals that they work with and train.¹⁸¹ More than a third of the injuries are classified as severe—deep wounds, fractures, or requiring stitches.¹⁸² Trainers and staff in contact with captive marine mammals more than fifty days per year are several times more likely to endure a traumatic injury from the animals.¹⁸³

The captive marine mammals also suffer from a wide range of conditions, diseases, mental instability, and causes of death not found in wild populations. Some of these conditions and diseases include fungal bacterial pneumonia, bleeding ulcers, myocardial fibrosis, heart failure, chronic colitis, agranulocytosis, pseudomonas, and stress.¹⁸⁴ Additionally, wild captures are extremely dangerous and disruptive to the complex social structures of the marine mammals—both those taken captive and those remaining wild.¹⁸⁵ The process of wild captures exerts extreme stress on the animals, many of which die during the process.¹⁸⁶ Bottlenose dolphins face a six-fold increase in risk of mortality immediately after capture and after every transfer, indicating that they never acclimatize well to transfer.¹⁸⁷

Despite all the injuries and horrors inherent in the current system of marine mammal captivity practices, these methods and culture have been fostered by the hefty influence of the public display industry. The industry strongly endorses APHIS as the primary agency regulating captive standards, due in part to APHIS's long history of regulating animal health care¹⁸⁸ and their

181. Tania D. Hunt et al., *Health Risks for Marine Mammal Workers*, 81 DISEASES OF AQUATIC ORGANISMS 81, 84 (2008).

182. *Id.*

183. *Id.* at 86.

184. KIELTY, *supra* note 30.

185. THE PERFORMING ORCA, *supra* note 56, at 13, 46-47.

186. See Olesiuk et al., *supra* note 101, at 5; see also Barbara E. Curry, *Stress in Mammals: The Potential Influence of Fishery-Induced Stress on Dolphins in the Eastern Tropical Pacific Ocean*, NOAA FISHERIES (Apr. 1999), <http://swfsc.noaa.gov/publications/TM/SWFSC/NOAA-TM-NMFS-SWFSC-260.PDF> (discussing physiological responses to capture-related stress such as capture myopathy, hypothermia, acute shock, and dysfunctional reproductive and immune systems).

187. Robert J. Small & Douglas P. DeMaster, *Acclimation to Captivity: A Quantitative Estimate Based on Survival of Bottlenose Dolphins and California Sea Lions*, 11 MARINE MAMMAL SCI. 510, 515-18 (1995)).

188. The public display industry points to APHIS's history as the regulating entity: APHIS has more than 20 years' experience in monitoring and regulating the humane care and treatment of marine mammals in captivity, employing a professional veterinary staff to inspect facilities. APHIS was given authority under the AWA to regulate warm-blooded animals, including marine mammals, for public display in the early 1970s, and first published regulations on marine mammals in 1979. APHIS resources include a National Animal Health Monitoring System, National Veterinary Services Laboratories, and a Veterinarian-in-Charge in every state.

BUCK, *supra* note 28, at 17-18 n.55

lack of aggressive enforcement actions.¹⁸⁹ After the MMPA was reauthorized in 1994 and underwent several amendments, members of the animal protection community attempted to replace APHIS with NMFS as the regulatory agency with authority over captive standards due to APHIS's history of lax enforcement, lack of expertise with aquatic species, and susceptibility to the public display industry's influence.¹⁹⁰ Due to the industry's dominant influence, vast resources, and powerful lobbying, the animal protection community's attempted measures were summarily defeated.¹⁹¹

APHIS announced its intention to amend marine mammal regulations in 1990 and published an advanced notice of proposed rulemaking in 1993; however, the final rules, which left important regulations unchanged, were not published until 2001.¹⁹² For example, orca pool and enclosure size requirements were based on the size of pools at already existing facilities, which essentially allowed the marine parks to have set the standards.¹⁹³ Formulas for determining pool size requirements were arbitrarily calculated based on how orcas were housed at the time the regulations were written: "an imaginary circle drawn in the centre of an orca enclosure must measure at least 14.6m (48ft) in diameter; roughly twice the length of the average animal. Minimum depth requirement is a mere 3.7m (12ft)."¹⁹⁴ The minimum volume of water traversed on average by a wild orca in one day is 45,302,778,000 gallons, which is more than 9,000 times the amount in all interconnecting orca pools at the SeaWorld parks.¹⁹⁵ There are numerous incidents documented of orcas intentionally ramming pool walls, slamming their bodies against their enclosures, and even jumping out of tanks onto dry cement.¹⁹⁶ Nonetheless, APHIS has failed to adjust these regulations, largely due to the influence of the public display industry.¹⁹⁷ Even today, the industry "continues to lobby to keep enclosure size . . . [at the] current outdated levels, which indicates that economic factors rather than animal well-being are the industry's first priority."¹⁹⁸ However, there are other

189. *Id.* at 17, n.45 ("Critics cite examples where APHIS appears content to wait for facilities to fix recurring problems rather than taking more aggressive action, and where APHIS is alleged to have accepted a facility's tank measurements rather than taking independent measurements.")

190. *See id.* at 16.

191. *See* ROSE ET AL., *supra* note 11, at 63 n.150.

192. BUCK, *supra* note 28, at 17 n.53.

193. WILLIAMS, *supra* note 55, at 32.

194. *Id.* at 32.

195. THE PERFORMING ORCA, *supra* note 56, at 40.

196. *See* OCEANIC PRESERVATION SOC'Y, *supra* note 75.

197. *See generally* 9 C.F.R. §§ 3.100-118 (2012).

198. ROSE ET AL., *supra* note 11, at 63 n.150.

factors at work—factors that cannot be assigned value and figured into the bottom line.

Holding intelligent, self-aware, highly social marine mammals in captivity creates an ethical dilemma that some can no longer ignore. In 1998, two researchers discovered that bottlenose dolphins possess self-awareness through an experiment in which dolphins recognized their own reflections.¹⁹⁹ Only a few species—including humans and chimpanzees—have this highly-developed cognitive skill.²⁰⁰ Dolphins are also highly intelligent. Researcher John Lilly, the pioneer of dolphin research, found that dolphins understand and use a complex vocabulary.²⁰¹ Lou Herman conducted his own studies to learn that dolphins can understand grammar, syntax, and artificial languages composed of electronic sounds and human hand gestures, including finger pointing, which chimpanzees cannot understand.²⁰² Adjusted for body size, bottlenose dolphins have the second largest brains,²⁰³ which allow problem-solving and even the potential for recognizing human emotion.²⁰⁴ Many people—including some dolphin researchers—struggle with the practice of keeping these animals in pools devoid of cognitive interests.²⁰⁵ This, in turn, leads to the ceaseless debate of captivity versus the wild.

The argument over the living conditions and quality of life enjoyed by captive versus wild marine mammals is both over-worked and unbalanced. Proponents of captivity, such as the public display industry and researchers dependent on captive sub-

199. See Kenneth Marten & Suchi Psarakos, *Evidence of Self-Awareness in the Bottlenose Dolphin* (*Tursiops truncatus*), in SELF-AWARENESS IN ANIMALS & HUMANS: DEVELOPMENTAL PERSPECTIVES 361 (Sue Taylor Parker et al. eds., 1995); see also Grimm, *supra* note 149.

200. See Lori Marino, *Convergence of Complex Cognitive Abilities in Cetaceans and Primates*, 59 BRAIN, BEHAV. EVOLUTION 21 (2002).

201. Grimm, *supra* note 149, at 527.

202. *Id.*

203. Jennifer Viegas, *Dolphins, Humans Share 'Brainy' Genes*, DISCOVERY NEWS (June 26, 2012 3:00 AM), <http://news.discovery.com/animals/whales-dolphins/dolphins-human-brain-120626.htm> (“If we use relative brain size as a metric of ‘intelligence’ then one would have to conclude that dolphins are second in intelligence to modern humans.”).

204. David Grimm, *Is a Dolphin a Person?*, SCIENCE NOW (Feb. 21, 2010 10:50 PM), <http://news.sciencemag.org/sciencenow/2010/02/is-a-dolphin-a-person.html>. See also Diana Reiss & Lori Marino, *Mirror Self-Recognition in the Bottlenose Dolphin: A Case of Cognitive Convergence*, 98 PROC. NAT'L ACAD. SCI. 5937 (2001).

205. BUCK, *supra* note 28, at 25. See also Allen Goldblatt, *Behavioural Needs of Captive Marine Mammals*, 19.3 AQUATIC MAMMALS 149, 150, 154 (1993) (Under-stimulation and boredom contribute to abnormal behaviors in marine mammals, such as “exaggerated play behaviour with items [in the pool such as leaves] . . . , misdirected behavior patterns, e.g. sexual overtures to the trainers and other species . . . , play behavior with other species in the tank [like turtles] . . . , and high levels of stereotyped behavior patterns” The researcher concludes that marine mammals “need to receive [behavioral] stimulation and to control their environment,” or they will “show signs of stress such as exaggerated stereotyped behaviour.”) (citations omitted).

jects, claim that the wild environment is dangerous—full of predators and pollution.²⁰⁶ They continue the propaganda campaign against allowing wild animals live in their natural habitats. A SeaWorld researcher once claimed that their orcas

live in habitats where the water quality and temperature are carefully monitored and controlled. Unlike killer whales in the oceans, those at Sea World are not forced to contend with dangers such as shortages of food, parasites, and threats from humans. . . . [They] receive a balanced, nutritious diet, and we make sure their day includes plenty of exercise.²⁰⁷

A representative of the public display industry at the Subcommittee on Insular Affairs, Oceans and Wildlife Oversight hearing even went so far as to claim that captive marine mammals are “safer” than their wild counterparts because they “won’t have a run-in with a Bumblebee Tuna boat.”²⁰⁸ The other side of the argument has no trouble pointing out the flaws not only in the display industry’s argument, but also in their treatment of captive marine mammals. Board Chairman Bryan Pease of the Animal Protection and Rescue League points out, “I am sure the trainers will say they are well taken care of, but you can’t meet the behavioral needs of these large marine animals in a marine park.”²⁰⁹ The evidence supports this argument. The death rate for captive orcas is three-fold that of wild orcas.²¹⁰ Captive marine mammals develop psychological—sometimes even suicidal²¹¹ or infanticidal²¹²—conditions, increasing the risk of injury and death faced by the other animals held with them and the trainers.²¹³ Captive marine mammals, despite constant veterinary supervision, develop

206. LAWSON & BUCK, *supra* note 44. See also David Riley, *Our Love of Dolphins has Turned into a Questionable Affair*, 23 SMITHSONIAN 58, 63 (1993); Rose Address, *supra* note 46; HOYT ET AL., *supra* note 18, at 13.

207. Dan O’Dell, *Marine Zoological Parks: The Public Benefit*, in GETTING TO KNOW THE WHALES 120, 121 (Larry Wade ed., 1995).

208. Callie Enlow, *Captivity Audience*, SAN ANTONIO CURRENT (May 7, 2010, 5:22 PM), <http://www2.sacurrent.com/blog/queblog.asp?perm=70330>.

209. Mike Lee, *SeaWorld San Diego Suspends Shamu Show*, SAN DIEGO UNION-TRIBUNE (Feb. 24, 2010, 10:47 PM), <http://www.utsandiego.com/news/2010/feb/24/seaworld-san-diego-suspends-shamu-show-after/?print&page=all>.

210. ROSE ET AL., *supra* note 11, at 46.

211. For example, an orca rammed herself into a tank wall at SeaWorld San Antonio in 1991. She died of excessive skull fracturing, cerebral contusions, and hemorrhaging. OCEANIC PRESERVATION SOC’Y, *supra* note 75.

212. Another orca attacked her own six-month old calf during a show at SeaWorld Orlando in 1998. She smacked him with her tail, tossed him onto the platform, and then pinned him down while biting him. *Id.*

213. See NAOMI ROSE, THE HUMANE SOC’Y, KILLER CONTROVERSY: WHY ORCAS SHOULD NO LONGER BE KEPT IN CAPTIVITY 7 (2011).

fatal physical conditions and diseases that wild cetaceans do not exhibit.²¹⁴ These include herpes-driven brain inflammation called acute necrotizing encephalitis;²¹⁵ over-chlorination burning dolphins' skin;²¹⁶ and "bizarre, repetitive movements" such as heaving oneself upward out of the pool and colliding onto the cement ledge;²¹⁷ chronic, rupturing eye blisters;²¹⁸ and surgical anesthesia.²¹⁹ Clearly, the low quality and short duration of captive existence is cruel and unnecessary. Although natural predators and human-caused pollution plague the oceans, captivity facilities are not the solution as they only hasten death and offer low-quality life.

The industry spends vast resources fighting changes to the standards for fear that tighter regulations would require massive overhaul of most facilities' structures, including pools, holding tanks, veterinary care areas, as well as policies, staff training, procedures, and shows.²²⁰ The large public display facilities, most notably SeaWorld, Inc., depend heavily on the marine mammal shows. Orca and dolphin performances net massive profits.²²¹ For many audience members, watching a show is the primary reason for visiting the park.²²² One visitor admitted, " 'It's [the Shamu

214. WILLIAMS, *supra* note 55, at 40 ("[N]ecropsy reports reveal that captives are not spared from parasites or natural toxins and commonly report infestation by such parasites as nematode, trematode and tapeworm. Furthermore, the captive situation appears to increase the incidence of some infections rarely encountered in wild populations.").

215. OCEANIC PRESERVATION SOC'Y, *supra* note 75.

216. *Ocean World Getting Off Too Easy*, SUN SENTINEL (June 15, 1992), http://articles.sun-sentinel.com/1992-06-15/news/9202140682_1_ocean-world-petting-pool-marine-theme-parks; OCEANIC PRESERVATION SOC'Y, *supra* note 75.

217. WILLIAMS, *supra* note 55, at 44 (Samoa, held at SeaWorld, died at thirteen after two months of this abnormal behavior).

218. Sally Kestin, *Sickness and Death Can Plague Marine Mammals at Parks*, SUN-SENTINEL, May 17, 2004, <http://www.sun-sentinel.com/sfl-dolphins-conditionsdec31.0.1500614.story> (stating "[t]he condition is not uncommon in captive sea lions due to multiple factors, i.e. lack of salt water, direct sunlight (lack of shade), reflection of light from pool bottom, water quality, etc.").

219. *Id.*

220. WILLIAMS, *supra* note 55, at 69. In 1994, with cash donations of up to \$35,000 from Anheuser-Busch, AZA and AMMPA representative Robert Jenkins boasted that they had weakened the MMPA " 'through a consistent, coordinated and unrelenting approach to Capitol Hill and the Congressional staff responsible for the MMPA reauthorization [sic]; the public display community was able to achieve virtually all of [its] agenda.' " *Id.* citing Summer Jenkins, *Re-authorization of the Marine Mammal Protection Act*, 19 IMATA SOUNDINGS (1994). For annual SeaWorld Parks' lobbying budgets, see *SeaWorld Parks & Entertainment*, OPENSECRETS.ORG, <http://www.opensecrets.org/lobby/clientsum.php?id=D000056553&year=2010> (last visited May 7, 2013). For more information, see Ryan Skukowski, *Double Trouble for Bart Stupak, SeaWorld Makes Waves in D.C. and More in Capital Eye Opener*, OPENSECRETS.ORG (Mar. 19, 2010, 10:30 AM), <http://www.opensecrets.org/news/2010/03/double-trouble-for-bart-stupak-seaw.html>.

221. See Kestin, *supra* note 141 (finding, *inter alia*, that dolphins can generate \$1 million per year; in 2001, the Miami Seaquarium collected \$16.5 million in revenue; in 2003, the Dolphin Research Center in the Florida Keys generated \$3.4 million).

222. See Jiang et al., *supra* note 57, at 244.

Show] super cool. . . . Without it, I don't know if there's much of a SeaWorld.' ”²²³ Multiple economic factors are behind the display industry's actions—a very lucrative business venture stands to be lost if tighter regulations are enforced. Therefore, the industry continues to staunchly insist on their version of the situation that will most likely save their business. They insist that their facilities educate their visitors and follow important conservation practices and efforts.²²⁴

V. RECOMMENDATIONS & PROPOSAL FOR CHANGE

Majestic and powerful animals like orcas and dolphins capture our attention and create a sense of wondered amazement. Without this natural curiosity and attraction to marine mammals, marine parks would never survive. Unfortunately, the public display industry has perpetrated the ill-conceived notion that these animals are toys, that an orca is a huggable, “cuddly sea panda, who lets children sit upon its back and playfully splashes crowds with water”²²⁵ instead of a powerful, intelligent animal. By ignoring the needs and natural history of marine mammals like the orca and leading the public to believe in the benefits of captivity, the public display industry has derived massive profits and worsened the plight of their captives. But, we the public have been complicit in these injustices, blindly accepting the glitzy exterior that the marine parks have so diligently crafted. The facade is cracking. What once was awe-inspiring and thrilling family fun is now being seen as the frightening circus that has always been. The time for change, for activism, and for global compassion is upon us.

From the animal rights' and conservation perspectives, the ideal solution to the numerous problems with the public display industry would be to eliminate marine mammal captivity. While that would solve these problems, it would be a sad and missed opportunity to further animal rights and conservation policies while simultaneously keeping the facilities open. Millions of visitors enjoy marine parks each year, despite their hidden faults and obvious shortcomings. Instead of smashing down with the iron hand of regulation, less severe options should first be pursued.

The goal of the government, the marine parks, and the public should be to transition captivity-based entertainment into conservation-oriented projects. This gradual process should mandate

223. Lee, *supra* note 209. This comment was made hours after the drowning of the SeaWorld orca trainer in 2010.

224. *See infra* Parts II, III.

225. WILLIAMS, *supra* note 55, at 92.

no more wild-captures that benefit the public display industry. Furthermore, wild-captured orcas and dolphins should be rehabilitated with the goal of returning them to their native pods. The management of these programs alone promises to be a lucrative, conservation-friendly business enterprise. The marine mammals' quality of life and natural behaviors should be the utmost priority. Instead of orchestrated performances, marine parks should transition to exhibits boasting their rehabilitation programs and real, scientific research should be disseminated to the public. As part of these new management programs, the facilities should be redesigned so as to create the least stressful rehabilitation environment possible. For example, new pools and enclosures should minimize background noise and maximize the acoustical experience inside the tanks. When possible, natural enclosures should be designed and built to simulate the natural experience of marine mammals, such as catching live fish and diving.

The principles of conservationism and marine mammal protection are not mutually exclusive from profitable business endeavors. These principles can be incorporated into existing facilities as evidenced by two very successful programs in the U.K. seal rehabilitation and release at the Sea Life Centre focuses on retraining life skills and release back into the wild²²⁶ rather than the commercial aspect of incorporating these mammals into a profit producing arena. The Jersey Zoo's commitment of twenty-three percent of its gross income to conservation²²⁷ clearly exemplifies what can be done. Self-regulation has clearly allowed U.S. facilities to favor bottom-line commercialism over a commitment to the future of these mammals through research and conservation. As research suggests, at least ten percent of each facility's operating budget should be allocated to research and conservation.²²⁸ If the transition to rehabilitation facilities is pursued, it should be much larger.

In the interim, while the public display industry and scientists design a completely new program, the Marine Mammal Protection Act should undergo amendments regarding the public display exception for holding captive animals. These amendments should include eliminating the industry-set standards and replacing them with agency regulations derived from responsible animal care practices, current scientific knowledge, and conservation-oriented policies. Regulatory inadequacies must be addressed and mandatory standards must not only be set, but also must be

226. See ROSE ET AL., *supra* note 11, at 13.

227. Tribe & Booth, *supra* note 127, at 67.

228. Kelly, *supra* note 127, at 10.

enforced in a timely manner. Revisions must be made within a reasonable time frame. Additionally, the MMPA should require that the new regulations cover species-specific and geographic-specific regulations that take into account the natural habitat of the particular show species. For example, it would be illegal to hold orcas in outdoor pools in Orlando.²²⁹ Ideally, these species-specific regulations would not allow captive orcas in false-bottom enclosures like pools. Instead, they should be in open-water, coastal holding areas like the Navy's dolphin pens in San Diego Bay.²³⁰ The amended MMPA or the subsequent regulations should create a process for ongoing evaluation of programs to ensure that they are at least meeting the new standards. This might require removing APHIS from its current position as the primary agency regulating captivity living conditions. However, before replacing APHIS completely, the new regulations should allow the agency a limited amount of time to redeem itself. If APHIS is able to satisfactorily oversee all of the facilities and enforce the new laws, it should not be stripped of its position. In addressing these issues and amending the Act, the call for no public displays should be distinguished from the call for no captive research. Alternate funding for captive research without the accompanying shows/displays should be investigated.

Marine mammals play a crucial role in the marine ecosystems as well as in the human experience. These creatures should be treated simultaneously with dignity as intelligent, socially complex animals and the respect deserving of wild animals. The unjust practices of captivity in the United States should be terminated as we strive to be a world leader in justice for captive marine mammals just as we are in human justice.

229. Although wild orcas do frequent the Gulf of Mexico's warmer waters, most orcas are unable to survive in exclusively warm waters. It is unknown whether orcas sighted in the Gulf remain there year-round. However, most reported Gulf sightings have occurred in the cooler months, when water temperatures range from the fifties to sixties in degrees Fahrenheit. For a temperature guide for the Western and Eastern Gulf, see *NODC Coastal Water Temperature Guide (CWTG)*, Nat'l Oceanographic Data Ctr., <http://www.nodc.noaa.gov/dsdt/cwtg/index.html> (last visited May 7, 2013). For more information, see *Killer Whale (Orcinus orca): Northern Gulf of Mexico Stock*, NOAA FISHERIES (Nov. 2010), available at <http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2003whki-gmxn.pdf>. Notwithstanding Gulf orca populations, none of the captive orcas have been captured from these pods known to frequent the Gulf. Therefore, the natural habitat of all wild-caught orcas in marine parks is cooler waters.

230. Grimm, *supra* note 149, at 528.