Letter from Scientists and World Animal Protection to the Travel Industry

Whales and dolphins held in captive facilities, such as bottlenose dolphins, beluga whales, and orcas, are wholly aquatic, wide-ranging, deep-diving predators. In the wild, they travel between 40 and 225 km in a day, reach speeds as high as 50 km an hour, and can dive from 500 to 1,000 m deep.[1] Bottlenose dolphins often have home ranges exceeding 100 square km.[2] These mammals are highly intelligent and socially and behaviorally complex.[3] No captive marine mammal facilities can simulate their habitat: enclosures are commonly barren, concrete tanks. Moreover, they are tiny compared to these species' natural home ranges. The majority of bottlenose dolphins worldwide are kept in tanks that on average are over 200,000 times smaller than their natural home range[2]. US regulations allow two bottlenose dolphins to be held in a tank less than 120sq ft and only 6 ft deep[4]. Even the most recent proposed amendment of these regulations did not include suggestions to increase these minimum requirements[5]. In addition, captive whale and dolphin social groupings are not natural.[6] For example, orcas, who may spend their entire lives with their mothers and siblings, are typically removed from their mothers to separate tanks or facilities after only three or four years, if not sooner.[7]

Because of these many differences in circumstance, captive whales and dolphins are often seen behaving stereotypically: circling and repeating behaviors without purpose, which is an indicator of poor welfare in animals.[8] In addition, the mortality rates of captive dolphins are similar to those of wild populations facing shark attacks, disease without veterinary care, pollutant contamination, ship strikes, and fishing

[1] For example: Durban, J.W. and Pitman, R.L. (2012). Antarctic killer whales make rapid, round-trip movements to sub-tropical waters: Evidence for physiological maintenance migrations? *Biology Letters* 8: 274– 277. Baird, R.W. *et al.* (2005). Factors influencing the diving behaviour of fish-eating killer whales: Sex differences and diel and interannual variation in diving rates. *Canadian Journal of Zoology* 83: 257–267.
[2] World Animal Protection (2019). *Behind the Smile*. (World Animal Protection, London).
[3] See Reynolds, J.E. and Rommel, S.A. (eds.) (1999). *The Biology of Marine Mammals* (Washington, DC: Smithsonian Press); Mann, J. *et al*. (eds.) (2000). *Cetacean Societies: Field Studies of Dolphins and Whales* (Chicago, Illinois: The University of Chicago Press); Parsons E.C.M. *et al.* (2012). *An Introduction to Marine Mammal Biology and Conservation* (Boston, Massachusetts: Jones & Bartlett Learning); Mann, J. *et al.* (eds.) (2017). *Deep Thinkers* (London, United Kingdom: Quarto).
[4] Animal and Plant Health Inspection Service (2019). *Animal Welfare Act and Animal Welfare Regulations*. USDA.
[5] Rose, N.A. *et al*. (2017). Improving captive marine mammal welfare in the United States: Science-based recommendations for improved regulatory requirements for captive marine mammal care. *International Journal of Wildlife Law and Policy* 20: 38–72.
[6]Page 192 in Clegg, I.L.K. and Butterworth, A. (2017). Assessing the welfare of Cetacea. In A. Butterworth (ed.), *Marine Mammal Welfare* (Cham, Switzerland: Springer), pp. 183–211.
[7]Pages 56–59 in Hoyt, E. (1992). *The Performing Orca: Why the Show Must Stop* (Bath, United Kingdom: Whale and Dolphin Conservation Society). See also the chapter by Schroeder (1989) in Leatherwood, S. and Reeves, R.R. (eds.) (1989). *The Bottlenose Dolphin*. (Cambridge, Massachusetts: Academic Press).
[8] Page 169 in Clegg, I.L.K. *et al.* (2017). Applying welfare science to bottlenose dolphins (*Tursiops truncatus*). *Animal Welfare* 26: 165–176.

worldanimalprotection.org
5th Floor, 222 Grays Inn Road, London WC1X 8HB **T**: +44 (0)20 7239 0500
F: +44 (0)20 7239 0653 **E**: info@worldanimalprotection.org

gear entanglement.[9] The mortality rate of dolphins in tanks is also higher than that in sea pens.[10] In particular, survival rates for captive orcas are "poor when compared to wild killer whales,"[11] with captive orcas rarely live longer than 30 years, with many dying in their teens and 20s.[12]

Furthermore, encounters with marine mammals pose the risk of zoonotic disease transmission and that the list of transferrable diseases is growing, including several potentially "life threatening" diseases[13]. While trainers at captive facilities may be aware of this increased occupational risk, it is questionable to expose visitors or tourists to these risks on a daily basis that may lead to unwittingly carry contracted diseases with them.

We note that several travel companies have recently made policy changes and public commitments to not provide tickets to captive dolphin facilities,[14] including TripAdvisor,[15] Virgin Holidays[16] and Airbnb.[17] Expedia is one of the largest online providers for travel and holiday experiences. On 21 February 2020, it was announced that they would continue to promote and sell tickets for captive dolphin facilities, provided that such facilities were 'accredited' by the World Association of Zoos and Aquariums (WAZA), or the Alliance of Marine Mammal Parks and Aquariums (AMMPA). While we understand the intention behind this decision is to help ensure 'acceptable' or humane treatment of captive cetaceans, in practice the conditions of captivity are inherently problematic for these species.

Membership in associations such as WAZA, or their affiliated national zoo associations, or accreditation by AMMPA do not address these inherent concerns about keeping

---

[9] Jaakkola, K and Willis, K. (2019). How long do dolphins live? Survival rates and life expectancies for bottlenose dolphins in zoological facilities *vs*. wild populations. *Marine Mammal Science* 35(4): 1418-1437.

[10] Venn-Watson, S.K. *et al.* (2011). Evaluation of population health among bottlenose dolphins (*Tursiops truncatus*) at the United States Navy Marine Mammal Program. *Journal of the American Veterinary Medical Association* 238: 356–360; Venn-Watson, S.K. *et al*. (2015). Evaluation of annual survival and mortality rates and longevity of bottlenose dolphins (*Tursiops truncatus*) at the United States Navy Marine Mammal Program from 2004 through 2013. *Journal of the American Veterinary Medical Association* 246: 893–898.

[11] Page 1362 in Jett, J. and Ventre, J. (2015). Captive killer whale (*Orcinus orca*) survival. *Marine Mammal Science* 31: 1362–1377.

[12] See DeMaster, D.P. and Drevenak, J.K. (1988). Survivorship patterns in three species of captive cetaceans. *Marine Mammal Science* 4: 297–311; Small, R.J. and DeMaster, D.P. (1995). Survival of five species of captive marine mammals. *Marine Mammal Science* 11: 209–226; Jett, J. and Ventre, J. (2015). Captive killer whale (*Orcinus orca*) survival. *Marine Mammal Science* 31: 1362–1377; Robeck, T. R. *et al.* 2015). Comparison of life-history parameters between free-ranging and captive killer whale (*Orcinus orca*) populations for application toward species management. *Journal of Mammalogy* 96: 1055–1070; see also *www.orcahome.de/orcastat.htm*.

[13] Waltzek, T.B. *et al.* (2012). Marine mammal zoonoses: A review of disease manifestations. *Zoonoses and Public Health* 59:521-535.

[14] Unless the facilities are for *bona fide* rescue and rehabilitation of injured animals or "seaside sanctuaries", i.e. large sea pen facilities for the 'retirement' of unreleasable animals that have been previously held in public display facilities. The policies encompass facilities that breed dolphins and other cetaceans, or catch them from the wild.

[15] https://tripadvisor.mediaroom.com/2019-10-02-TripAdvisor-Updates-Industry-Leading-Animal-Welfare-Policy-With-A-Commitment-To-End-Whale-Dolphin-Captivity

[16] https://www.virginholidays.co.uk/responsible-tourism/supply-chain/cetaceans

[17] https://www.airbnb.com/help/article/2634/why-is-it-harmful-to-wildlife-to-keep-marine-mammals-in-captivity

dolphins in captivity. They may also encourage sustaining or even increasing the captive population through captive breeding, as well as the issuance of permits to take them from the wild for 'legitimate' reasons.[18] The AMMPA states that wild capture must occur "humanely" and uses the term "collect" to describe a process that is inherently inhumane and stressful.[19] Most associations use 'performance-based' standards, such as requiring a tank to be of a size that allows the animal to 'express natural behavior.' For cetaceans, who can dive hundreds of meters and can swim dozens of kilometers in a day, such a requirement has little meaning when a typical enclosure is 5-10 meters deep and 30-50 meters long. A recent review found that the average size of the largest primary tank at captive dolphin facilities was just 444 square meters, a little over the size of an IMAX screen and 200,000 times smaller than a conservative estimate of a dolphin's home range of 100 square km.[20]

Furthermore, the AMMPA refers to US regulations for minimum space requirements if other applicable legislation does not exist.[21] These US regulations allow two bottlenose dolphins to be kept in a tank with a minimum surface area of 11 square meters and a minimum depth of 1.83 meters.[22] A proposal to update these regulations in 2016 received input from the AMMPA that would have decreased the acknowledged average body lengths for dolphins and other cetaceans in the law[23] - a step that would have even further decreased the minimum space requirements.

Regardless of the inherent inability of cetaceans to thrive in captivity, WAZA is a membership organization[24] and does not actually require its members to go through an accreditation process, nor does it inspect facilities for safety or welfare violations.[25] WAZA has a code of ethics,[26] but it does not enforce this code in a systematic way. For example, the WAZA code of ethics states that member facilities should "not demean or trivialise the animal in any way," but a recent NGO report found that numerous WAZA member facilities violate these standards when providing dolphin shows. Of the accredited or member facilities currently promoted by Expedia that offer dolphin shows, 87% allow the dolphins to be ridden by trainers.[27] Cross-referencing the identified dolphin venues in the report with WAZA, EAZA, AZA, JAZA or ALPAZA memberships, 53 members offer dolphin shows, of which 25 include trainers

[18] WAZA Code of Ethics. https://www.waza.org/wp-content/uploads/2019/05/WAZA-Code-of-Ethics.pdf.
[19] International Code of Best Practices for Dolphin Facilities (2013).(Alliance of Marine Mammal Parks & Aquariums).
[20] World Animal Protection (2019) *supra* at 2.
[21] AMMPA Accreditation Standards & Guidelines (2017 .(Alliance of Marine Mammal Parks & Aquariums).
[22] Animal Welfare; Subchapter A; Animal Welfare Act United States of America (2013).
[23] Letter dated 4 May 2016 from Kathleen Dezio President and CEO The Alliance of Marine Mammal Parks and Aquariums to Dr. Barbara Kohn, Animal and Plant Health Inspection Service, re: Docket Number APHIS 2006-0085 Regulatory Analysis and Development.
[24] Becoming a WAZA member requires filling out an application, submitting letters of support from two other WAZA members, and paying a fee.
[25] Unlike, for example, the U.S.-based Association of Zoos and Aquariums (AZA), which requires its members to meet AZA standards.
[26] WAZA Code of Ethics *supra* at 18.
[27] World Animal Protection (2019) *supra* at 2.

riding the animals or being pulled by them. The claims that these stunts are educational or promote conservation are questionable.[28] There is currently no research demonstrating that dolphin performances/shows at zoos or aquaria actually result in the conservation of cetaceans in the wild,[29] and there are apparently no significant gains in education from members of the public seeing live animals in marine mammal facilities.[30]

Moreover, WAZA has stated that although other zoo and aquarium associations are members of WAZA, it has no power to enforce or demand standards of zoos belonging to these member associations.[31]

AMMPA facilities are primarily in the USA, Mexico and Caribbean. The AMMPA does have an accreditation program that involves a two-day inspection, but the standards are internally set by the industry rather than by independent experts. Regardless, many AMMPA member facilities have been involved in controversial practices without censure; for example, Atlantis Paradise Island in the Bahamas took unsustainably wild-caught bottlenose dolphins from Cuba[32] as late as 2004.[33] Georgia Aquarium more recently attempted to acquire wild-caught beluga whales from Russia,[34] an import denied by the US Government due to sustainability concerns.

Therefore, we, the undersigned scientists, believe that Expedia Group's current policy of relying on WAZA and AMMPA membership for facilities it promotes does not ensure the health and welfare of captive dolphins, and does not contribute to reducing the demand for a supply of animals for tourism.

We therefore call on Expedia Group and other travel/tourism operators not to rely on WAZA membership and AMMPA accreditation as an assurance of the health and welfare of captive dolphins.

---

[28] *Ibid.* See also Adelman, L. M. *et al.* (2000). Impact of National Aquarium in Baltimore on visitors' conservation attitudes, behaviour and knowledge. *Curator* 43: 33–61 and Jiang, Y. *et al.* (2008). Public awareness and marine mammals in captivity. *Tourism Review International* 11: 237–250.

[29] At best, visitors express the *intention* of increasing their conservation-related behaviours, but no study has been able to assess whether these visitors actually follow through with these intentions and certainly studies have not assessed whether these actions, if they are in fact realized, directly or indirectly result in conservation (see Buckley, K.A. *et al.* (2020). Conservation impact scores identify shortfalls in demonstrating the benefits of threatened wildlife displays in zoos and aquaria. *Journal of Sustainable Tourism*. doi: 10.1080/09669582.2020.1715992).

[30] Miller *et al.* (2013) found no significant difference in knowledge gain or conservation attitudes or intentions between tourists who viewed a live dolphin show at a marine theme park, and those who did not (Miller, L.J. *et al.* (2013). Dolphin shows and interaction programs: Benefits for conservation education? *Zoo Biology* 32: 45–53).

[31] For example, see WAZA statements in: https://www.nationalgeographic.com/animals/2019/08/waza-zoos-accused-of-mistreating-animals-wap-report/#close.

[32] Van Waerebeek, K., *et al.* (2006) Live-captures of common bottlenose dolphins Tursiops truncatus and unassessed bycatch in Cuban waters: Evidence of sustainability found wanting. *Latin American Journal of Aquatic Mammals* 5(1):39-48.

[33] Via Cetabase.org.

[34] https://www.nbcnews.com/sciencemain/georgia-aquarium-denied-permit-import-18-beluga-whales-6C10871651.

Yolanda Alaniz Pasini, PHM, Scientist Consultant for Conservación de Mamíferos Marinos de Mexico COMARINO, Mexico

Giovanni Bearzi, PhD, President, Dolphin Biology and Conservation, Italy.

Maddalena Bearzi, PhD, President, Ocean Conservation Society, USA.

Silvia Frey, PhD, KYMA Sea Conservation & Research, Switzerland.

Toni Frohoff, PhD, Director, TerraMar Research, USA.

Bárbara Galletti, President and Scientific Director, Centro de Conservacion Cetacea, Chile.

Samuel Hung, PhD, Director, Hong Kong Cetacean Research Project, Australia & Hong Kong.

Andrew Lewin, President, Speak Up for Blue, Canada.

Michael Lück. PhD., Professor, School of Hospitality and Tourism, AUT University, Auckland, New Zealand.

Giuseppe Notarbartolo di Sciara, PhD, marine conservation ecologist, Italy.

E.C.M. Parsons, PhD, Research Associate, Institute of Biodiversity, Animal Health & Comparative Medicine, Glasgow University, UK.
Heather Rally, DVM, Supervising Veterinarian, PETA Foundation, USA.

Diane Reiss, PhD, Director, Animal Behavior & Conservation Programs, Hunter College, City University of New York, USA.

Fabien Ritter, President, MEER eV, Germany.

Mario M. Rollo Jr., PhD, Assistant Professor, Biosciences Institute, São Paulo State (SP) University (UNESP), Brazil.

Naomi A. Rose, Marine Mammal Scientist, Animal Welfare Institute, UK.

Ashley Sitar Soller, PhD, Speak Up for Blue, USA.

Liz Slooten, PhD, Professor, Otago University, New Zealand.

Jeffrey Ventre, MD (Former Marine Mammal Trainer), Virginia Mason Memorial, Washington, USA.

Ingrid Visser, PhD, Orca Research Trust, New Zealand.

Lindy Weilgart, PhD, Consultant, OceanCare and Dalhousie University, Canada.

Thomas White, Ph.D., Hilton Professor Emeritus of Business Ethics, Loyola Marymount University; Fellow, Oxford Centre for Animal Ethics

Hal Whitehead, PhD, Professor, Dalhousie University, Canada.