



Behind the smile

The multibillion-dollar
dolphin entertainment industry



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Foreword

Twenty-seven years ago, I received my PhD after spending five astonishing years in the field with wild orcas in British Columbia. Within a few months, I joined the staff of a nonprofit animal protection organization to run its new campaign to end the captive display of orcas, pilot whales, false killer whales and belugas. These are the larger 'small' cetaceans most typically held in zoos, aquaria, marine theme parks and dolphinarium.

I began with what I felt were realistic expectations. I believed that, by the time I retired, I could help to move the needle a bit toward ending cetacean display. I knew that keeping these socially complex, intelligent and wide-ranging marine predators in small enclosures for human entertainment was ethically wrong and made it my life's work to support this position with solid scientific evidence.

Despite this powerful sense of purpose, my rational side convinced me that I could not expect to see much shifting of the paradigm within my lifetime. Captive cetacean performances were still a much-loved staple of theme parks and dolphinarium worldwide 26 years ago – even only 10 years ago. I could make a difference, but my common sense told me my victories would be few and, perhaps, imperceptible to most.

The feature film 'Free Willy' gave the anti-captivity campaign a boost in 1993 – my first year on the job – but the momentum didn't seem to last. I realize now that the movie's true impact was delayed. The young children who made 'Free Willy' a sleeper hit that summer grew up to be the 20-somethings who watched another film – a documentary on CNN 20 years later. 'Blackfish' was more than a hit – it was a phenomenon. I am convinced it pushed western society past the tipping point on the subject of captive cetaceans. I now believe the exploitation of at least some cetacean species will end before I do.

This report by World Animal Protection provides information that, despite my lengthy tenure working on this campaign, I did not know before. I have always approached this issue as a biologist – I know cetaceans and have always focussed on scientific arguments. This report expounds on the businesses that display these amazing beings. It offers detailed information on dolphinarium and their visitors: the Who, What, Where, Why and, perhaps most revealingly, the How Much, ie, how much money is at stake. The welfare of the marine mammals in their care logically *cannot* be the primary concern of for-profit companies that consider fines for regulatory violations a (minor) cost of doing (millions of dollars' worth of) business.

This report is timely – the more people learn, from all angles, about dolphinarium businesses, the better able they will be to assess the industry's marketing versus its reality. It is targeted toward the tourism providers who promote this industry without perhaps realizing the full scope of the suffering it inflicts on cetaceans. I hope it opens eyes. It should prove a valuable tool in moving the needle ever closer to 'these tanks are empty.'

Naomi A. Rose,
PhD, marine mammal scientist,
Animal Welfare Institute

Executive summary

This report outlines the massive scale and profitability of the multibillion-dollar dolphin entertainment industry. It highlights the industry's links with the corporate investment industry and the suffering of more than 3,000 dolphins for the money that is made from their labor. From being captured in the wild, to having to undergo captive breeding, to being forced to live in inhumane barren tanks, dolphins suffer at every stage of their captivity. Dolphin venues make false or wildly exaggerated claims regarding their benefits to conservation, education and research, fooling the public into accepting the inhumanity of cetacean captivity.

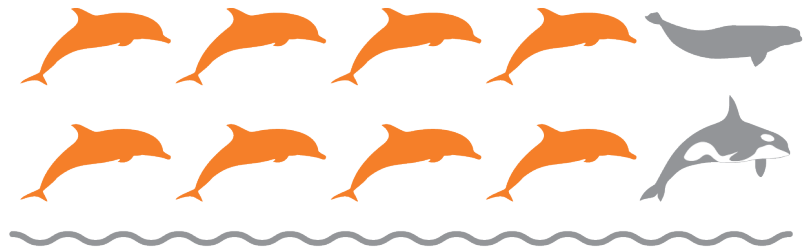
The term 'dolphin' does not refer to a specific species and sometimes leads to confusion. The orca, the pilot whale, the false killer whale, the spotted dolphin, the bottlenose dolphin and the melon-headed whale all belong to the Delphinidae family. This report has focused its research on smaller species that have 'dolphin' in their common name. These include the bottlenose dolphin, the white-sided dolphin, spinner and spotted dolphins, the Irrawaddy dolphin, Commerson's dolphin, Risso's dolphin, the rough-toothed dolphin and others. Unless otherwise specified, this report uses the term 'dolphin' to refer to these species and not the entire Delphinidae family.

Through desktop and in-country research carried out in 2018, World Animal Protection examined the scale and character of the dolphin entertainment industry. We identified 355 publicly accessible facilities across 58 countries worldwide that keep dolphins or other cetaceans in captivity. Of these facilities, 336 keep dolphins.

Our research shows that of the 3,603 cetaceans identified at those facilities, eight out of 10 (3,029) are dolphins, and 87% of those are bottlenose dolphins. More than 60% of all captive dolphins worldwide are kept by just five countries: China (23%), Japan (16%), the USA (13%), Mexico (8%) and Russia (5%). However, if looking at geographic regions, the Mexico, Caribbean, Bahamas and Bermuda region accounts for almost one in five captive dolphins globally and is therefore another hotspot for the industry.

We found that 93% of dolphin facilities worldwide offer shows with dolphins, while 66% offer swimming with dolphins, 75% offer selfies, and 23% offer dolphin-assisted therapy. The tricks performed during shows include dolphins pulling their trainers through the water by their fins, and trainers 'surfing' on the dolphin's back or being propelled out of the water by the dolphin's snout. Often, dolphins are made to leave the water to spin in circles, or wear hats or oversized glasses - and all to music as loud as 110 dB. This is similar to the volume of a rock concert. In light of these activities, the claims by dolphin facilities that they serve an educational purpose for families is highly questionable.

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Inhumane confinement

Sixty-six percent of dolphins at 233 of the venues identified in our research are kept in concrete tanks. Of those, 95 venues use only indoor tanks, which means 575 dolphins are kept in conditions where they never experience sunlight or weather.

In the wild, bottlenose dolphins often have home ranges exceeding 100 sq km, with some populations' home ranges in excess of 400 sq km. In captivity, this study found that the average size of the largest primary tank used at dolphin facilities is just 444 sq m. This means that most dolphins only have a space slightly larger than a theater screen. That's more than 200,000 times smaller than their natural home range. Sea pens are usually larger, but even the average sea pen size is about 77,000 times smaller than a dolphin's home range in the wild. Even the largest sea pen identified in this research is 12,000 times smaller than a dolphin's natural home range.

The profitability of dolphins

Our research shows the average global price for dolphinarium entry tickets is 34 USD per adult, with higher average prices between 50 and 74 USD in some regions, including North America and the Caribbean. Entry prices do not usually include any dolphin interactions, which cost more than three times as much as the entry ticket on average. The average price for the most expensive dolphin activity at each venue – usually a swim-with experience – is 178 USD per person in a group. Activity prices, however, can cost up to 1,000 USD for more individualized packages.

A single dolphin can generate between 400,000 and 2 million USD per year for a venue, depending on the frequency of use. This means that all captive dolphins in the tourism industry annually generate between 1.1 and 5.5 billion USD. Add to that additional income channels through merchandise, food and accommodation, and the revenue is even greater. It is literally a multibillion-dollar industry – and all on the back of the suffering of wild animals.

Companies associating with cruelty

Our financial research into selected large-sized dolphinariums across the world reveals a complex network of corporations behind this profit-driven industry. Many dolphinariums are part of larger international conglomerates, which often own dozens of dolphinariums and water parks globally. There is massive international financial backing behind dolphinariums, including from banks, private equity firms and investment companies all motivated by profit maximization.

Dolphinariums closely align themselves with their industry partners and their association with major brands adds social license and a sense of acceptability to their inhumane treatment of dolphins. Travel agencies, associations, tour operators and booking platforms are all essential contributors to the dolphin industry and add significantly to this social license. We found that one in four tourists visited a dolphin venue because it was part of their tour package or it was suggested to them by their holiday company. The swim-with-dolphin industry in the Caribbean has arguably been fueled by major cruise lines wanting to give their guests memorable, exotic experiences. Similarly, many trips sold by international travel companies include dolphin activities.

During our research, we reviewed the travel products sold by 31 of the leading travel companies to see if they included any of the top ten largest dolphin facilities that we identified. We found that two out of three companies offer at least one of the ten largest dolphin facilities in their products. Some offer up to eight.

Expedia Group was one of the companies that offered not only the most of the top ten dolphin facilities, but also many more. Thirty-two dolphin facilities across many countries were offered by one or multiple companies belonging to Expedia Group. Therefore, Expedia Group's ticket sales to these facilities alone is enough to support the keeping of over 500 dolphins in inhumane conditions. They are a significant driver of the dolphin industry.

Positively, 11 companies did not sell any of the top ten dolphin facilities, and a few of these companies have developed progressive policies that avoid all – or at least the worst – captive wildlife activities. Recent additions to the list of progressive travel companies are Booking.com, Virgin Holidays and British Airways Holidays who, in 2019, all announced policies of not selling or promoting captive dolphin and whale attractions.

Consumer attitudes to dolphinarium

By commissioning consumer surveys, World Animal Protection has gained valuable insight into the global popularity and acceptability of dolphin entertainment. After visiting a zoo or aquarium and viewing wild animals in their natural habitat, watching a dolphin show is the third most common activity involving wild animals. One survey showed that 17% of respondents had been to see a dolphin show in the past three years.

In the four key regions of Mexico, the United States, Spain and the Caribbean, the United States was the most visited country by travelers participating in dolphin experiences. Sixty percent had visited a U.S. dolphin venue in the past four years. Close to half of the respondents chose to visit these markets specifically to have a dolphin experience.


Our research shows that for over half of those travelers visiting dolphin venues, their motivation to visit arose from a love for dolphins. This demonstrates that although the vast majority of visitors (69%) are university educated, there is a clear lack of understanding around dolphin needs and how life in captivity compromises those needs. The dolphin's 'smile' (a result of the shape of its jaw, not its emotional state) paints a skewed picture of life in captivity and contributes to the myth that captive dolphins enjoy a happy life.

The acceptability of dolphin entertainment


Our survey revealed high levels of acceptability of dolphin attractions. Some 55% of respondents said they didn't see anything wrong with going to a dolphin show. Acceptability decreases, however, when the level of interaction increases. Swimming with dolphins, kissing or touching them, and riding or being pulled by them are seen as being less acceptable than taking dolphin selfies and feeding them.

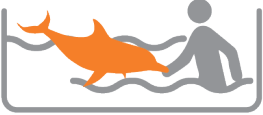
Despite the current high levels of acceptability of dolphin entertainment, when the perceptions of respondents were examined more closely, concerns about welfare were raised. Fifty-two percent of respondents believe dolphins suffer physically and emotionally in captivity and 47% believe that no dolphin would perform tricks or give rides and kisses to people willingly. Most importantly, 80% of respondents said they would prefer to see dolphins in the wild if they had the chance. Tellingly, one in four visitors said that seeing dolphins in an enclosure felt wrong, and that all dolphin venues should be closed.



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Solutions

It's a tragic reality that, for the majority of captive dolphins, seaside sanctuaries or releases into the wild are unlikely to be viable solutions. A lack of funding and a lack of suitable geographic areas, plus the unsuitability of captive-bred dolphins for release are all significant barriers to successful seaside sanctuaries. This makes it even more important that we see an end to captive breeding and wild capture, given the fundamental welfare problems associated with cetacean captivity. Only these measures will ensure that the current generation of captive dolphins will be the last to suffer in tiny tanks and pens.

Activities where dolphins are used to perform or interact with humans should end. These should be replaced with behavioral enrichment activities that are more in line with dolphins' biological needs and natural behaviors. Wherever possible, welfare standards should be strengthened, particularly with regard to enclosure sizes, diet, socialization, the prevention of breeding and environmental enrichment.

Of course, since dolphins' needs can only be fully met in the wild, any improvements in welfare will remain a compromise, and can in no way justify the continued keeping and breeding of cetaceans in captivity. However, these changes would alleviate the worst suffering while the captive dolphin population gradually declines.

At least 65% (204) of all dolphin facilities include other consumer-focussed attractions such as theme parks. These attractions would enable the businesses to continue without exploiting captive cetaceans.


People power and the travel industry's responsibility

Both consumers and the travel industry have the power to stop the exploitation of dolphins. Consumers can do so by simply not buying tickets or holidays with the travel companies that promote them. As the truth behind the dolphin's 'smile' and the dolphin entertainment industry becomes increasingly exposed, that demand from customers will drop.

Travel organizations have to take responsibility for their role in feeding visitors to dolphinariums. Offering activities involving dolphins contributes to the public assumption that these activities are acceptable, and this must stop. The public is still largely unaware of the cruelty involved in dolphin entertainment and the tactics used to mislead visitors. With the publication of this report, travel companies have been put on notice, and those that continue to sell inhumane dolphin entertainment do so knowingly.

The most responsible travel organizations do not only *pledge* to ban inhumane dolphin entertainment, but proactively and effectively *implement* the ban - as sometimes promises have been shown to be broken. Building on this, World Animal Protection urges travel organizations to develop and implement policies which are committed to promoting responsible alternatives in the wild. The development of alternatives where the well-being of dolphins is central is key, along with the acknowledgement that dolphins are wildlife, not entertainers.

All captive dolphins in the tourism industry annually generate between

 billion
USD

Introduction

Throughout the world cetaceans – dolphins, whales and porpoises – are being taken from the wild or bred in captivity to be used for entertainment in tourism venues. Dolphin species, known for their intelligence and ‘smile’ – and many for their acrobatic ability – are the most common cetaceans in captivity. Our data shows that more than eight out of 10 captive cetaceans are a species of dolphin.

From their traumatic capture from the wild to being bred for confinement in grossly inadequate conditions, dolphins and other cetaceans suffer immensely in captivity. Their use in wildlife entertainment causes them harm, stress and discomfort. Furthermore, their reduction from wild complex predators to circus-style performers is demeaning. Many will experience food deprivation as part of their training, reducing them to beggars who must perform to eat.

Keeping dolphins in captivity for entertainment offers no genuine benefit to conservation and scant educational benefits, despite claims to the contrary from marine entertainment venues. It is inhumane and unethical to use captive dolphins and other cetaceans for entertainment.

The term ‘dolphin’ does not refer to a specific species and sometimes leads to confusion. For example, the family of Delphinidae comprises a large range of species that differ in their physiognomy, behavior, occurrence and habitat ranges. The orca, the pilot whale, the false killer whale, the spotted dolphin, the bottlenose dolphin and the melon-headed whale all belong to the Delphinidae family.

This report has focused its research on smaller species that have ‘dolphin’ in their common name. These include the bottlenose dolphin, the white-sided dolphin, spinner and spotted dolphins, the Irrawaddy dolphin, Commerson’s dolphin, Risso’s dolphin, the rough-toothed dolphin and others. Unless otherwise specified, this report uses the term ‘dolphin’ to refer to these species and not the entire Delphinidae family.

The businesses benefitting from the misery of captive cetaceans often operate in an opaque manner. Since the 2013 release of the ‘Blackfish’ documentary, there is a growing awareness of the suffering of captive cetaceans, including dolphins. Until this report, the true scale and character of the global captive dolphin industry was unknown.

As part of our ongoing ‘Wildlife. Not Entertainers.’ campaign, this report represents the first comprehensive assessment of the global dolphin industry. It has been compiled to help expert stakeholders in the travel industry, governments, cetacean experts and regular travelers make informed decisions to protect dolphins.

The scale and character of the industry has been examined, and this report details the number of captive dolphins and venues that exist, and their geographical distribution. It also reveals the activities that dolphins are used to engage in globally, including circus-style shows and direct interactions with tourists. Data on dolphin housing, such as enclosure size and design, along with other variables which affect, and compromise dolphin welfare have also been analyzed.

It must be noted that we focused on the smaller dolphin species for this report and excluded orcas, pilot whales and false killer whales which, biologically, are also dolphins (see the ‘Defining dolphins’ box on the left). We made this decision, in part, due to the significant difference in the size and needs of these species. We also chose this focus because comprehensive information about the suffering of larger dolphins in captivity already exists. By focussing on the more common species that represent the vast majority of captive delphinids, we aim to complement the global knowledge on the exploitation of all cetaceans for entertainment.

This report also includes corporate case studies on key industry stakeholders in this multibillion-dollar industry, investigating their financial interests and ties. The relationship between the global travel industry and the dolphin entertainment industry has also been examined, highlighting the dolphin industry’s dependence on travel operators to feed consumer demand.

Through global surveys, the attitudes of consumers and the general public towards dolphin entertainment activities have been examined. This gives us valuable insight into the perceived acceptability of activities such as dolphin shows and swimming with captive dolphins.

The report concludes by offering potential solutions to end the suffering of captive dolphins and other cetaceans. These include captive breeding bans which ensure that no more dolphins are born into a lifetime of inhumane captivity, and responsible alternatives for the industry to promote. The current generation of captive dolphins used for entertainment must be the last.



Imprisoned in a tank: The size and design of a captive dolphin enclosure can never come close to replicating the scale and complexity of the dolphins' natural habitat. Photo credit: World Animal Protection.

Dolphin suffering for entertainment

Inadequate captive environments

Cetaceans (dolphins, whales and porpoises) are found worldwide, mostly preferring the rich, shallow seas on the continental shelf. Their aquatic nature and distribution, often over huge ranges, makes estimating populations difficult for many species. Most cetacean species captured from the wild or bred in captivity like the bottlenose dolphin (*Tursiops truncatus*) – the species most commonly held in captivity for public display – are not endangered overall. Some sub-populations, however, do face severe threats ¹.

In the wild, species such as bottlenose dolphins often have home ranges exceeding 100 square km ², though ranges vary greatly. Some populations have average home ranges in excess of 400 square km ³. In addition to huge home ranges, cetaceans explore the full water column. How deep they dive depends on the species, food abundance and distribution, but some species of dolphins have been shown to regularly dive 55m to the seabed while hunting ³. A record dive of 450m was recorded for one bottlenose dolphin ⁴. When the natural ranges of wild dolphins are compared to the minuscule spaces afforded to them in captivity, it's clear that it is impossible to provide adequate conditions.

At marine theme parks, the needs of the captive dolphins always come second to the needs of the public who view or interact with them. To avoid disappointing visitors, the shape, depth and overall size of their tiny enclosures are designed to make the dolphins readily visible even when underwater. Most tanks give the animals no room to retreat from public view.

At one venue visited by our investigators, pregnant dolphins are kept in a specific tank with underwater viewing areas, so the public can get a clearer view of the birth of the new calf. Were tanks larger and representative of even a fraction of the ranges occupied by wild dolphins and other cetaceans, the public's ability to view them would be greatly diminished.

Water treatment methods such as ozonation and chlorination are used in the dolphins' tanks. These maintain the water clarity needed for visitors to see the animals clearly and neutralize the bacteria from large quantities of animal waste products. The use of harsh chemicals like these can cause an array of health issues, particularly of the eyes and skin (see the 'Veterinary concerns' section on page 13).

Stress caused by noise pollution is a concern for captive dolphins. Often, their tanks are located near sources of loud noise, such as loudspeakers which blast out music during performances. What's more, as many marine theme parks and venues seek to diversify and attract more customers, roller coasters have been built near to some tanks.

While diversification away from animal entertainment is positive, it should be undertaken responsibly. Adding rollercoasters without thinking about the effects of the noise or the vibrations on the animals could cause additional suffering. Given captive cetaceans spend much time at the surface – because that's where they are fed and because they have negligible depths to dive – the in-air noise generated around their tanks is a worry ².

There are business reasons why tanks remain entirely unsuitable for captive cetaceans. Building larger tanks and improving design, for example, by varying depths and providing refuge spaces where the animals can hide, would be problematic for businesses. Changes such as these would not only reduce visibility for visitors, but would also be incredibly expensive and hinder training, which is easier in a smaller space ². Similarly, the surfaces of tanks are deliberately smooth, featureless and light coloured. This improves visibility and aid disinfection but provides no stimulation for the dolphins. The design of the tanks prioritizes the maintenance of captive dolphin populations for the benefit of visitors, over the well-being of the animals themselves. This contributes to the constant discomfort and suffering of dolphins trapped in this industry.

Intelligence

Cetacean intelligence forms the backbone of the ethical arguments against keeping these animals in captivity. Ironically, the intelligence of dolphins is often highlighted by entertainment venues as they demonstrate the animals' ability to respond to commands and perform complex choreography.

There is a large body of evidence examining the sophistication of cetacean cognition ^{2,5}, with the majority focusing on bottlenose dolphins as the most common research subjects. Publications which try to downplay the intelligence of dolphins – perhaps as justification for continuing captivity – have been heavily criticized by marine experts. In some cases they have serious conflicts of interest, with one book authored by a researcher with ties to the International Marine Animal Trainers' Association ^{6,7}.

Not only does the brain physiology of cetaceans suggest high levels of intelligence, sophisticated thought and cognition, ^{8,9} but their complex behavior implies it too. Bottlenose dolphins are believed to use signature whistles which are important for the recognition of individuals and essentially serve the same function as human names ¹⁰. Similarly, another study researching cetacean vocalizations found that their capacity to communicate – to carry information in dolphin calls – is similar to many human languages ¹¹.

Bottlenose dolphins have been successfully taught simple sign language. They have demonstrated the ability to understand simple human sentences and novel word combinations in much the same way as a small child can ¹². Research also suggests that dolphins have a sense of agency or ownership in their actions ¹³.

Dolphins can access memories of past events and anticipate future events ¹⁴, and research using mirrors found that dolphins are capable of self-recognition ^{15,16}. In human children, mirror self-recognition occurs from two years of age, whereas bottlenose dolphins recognized themselves from seven months of age ¹⁵. The high level of intelligence demonstrated by bottlenose dolphins and other cetacean species makes their confinement and use for entertainment highly unethical.

Behavior and stress

While dolphin venues may claim to improve the lives of captive cetaceans by keeping them safe from the threats of the ocean, these animals have evolved to survive and thrive in wild conditions. As space in captivity is extremely limited, the natural foraging and feeding patterns of dolphins are completely restricted. In the wild, the ranges of dolphins can extend hundreds of kilometres¹⁷. This allows for the full expression of natural behaviors as well as cultural traits specific to certain populations, such as specialized hunting techniques. Kept in tiny, featureless concrete tanks, dolphins are denied freedom of movement and the ability to carry out natural behaviors.

In the wild, they form close social bonds in pods of varying sizes, depending on species and location, ranging from a handful of individuals to more than 30¹⁸⁻²⁰. In the wild, dolphins are free to interact or avoid other individuals as they choose. In captivity, where decisions on groupings are husbandry-driven, this is not the case.

Aggressive interactions can occur in captive groupings where dolphins 'rake' their teeth against other dolphins as an act of dominance. Dolphins rake each other in the wild as part of determining social hierarchy; however, in most mammals, once dominance hierarchies are established, they remain relatively stable, reducing repeated aggression. In captivity, groupings are often changed for husbandry reasons and thus hierarchies must be re-established regularly. New dolphin transfers, introductions and separations destabilize the social grouping, which can lead to stress and aggression. Injuries from teeth raking in captivity have been fatal at times^{21,22}.

Group sizes in captive facilities usually consist of two to four dolphins per tank only. This is much smaller than average pod sizes in the wild and it likely impacts their social behavior.

Dolphins have also shown aggression towards other incompatible species kept in the same tank. The Pacific white-sided dolphins housed with an orca called Lolita at Miami Seaquarium have been recorded routinely attacking the orca, harassing, chasing and raking her with their teeth²³. Lolita's distressed breathing, vocalizations and movements to evade the aggressive dolphins have been recorded. The chasing by the dolphins and tiny tank size – reportedly the smallest in the world for an orca² – have been documented on video²⁴. In the wild, although mixed-species dolphin pods are seen, their interactions are not always benign. Housing different species together in captivity – where there is no room for the animals to avoid each other – frequently leads to increased aggression and discomfort.

Lolita the orca, housed with Pacific white-sided dolphins, has not seen another orca since her tank-mate Hugo died in 1980. Hugo died of a burst brain aneurysm after he intentionally smashed his head into the side of the tank walls. Hugo had repeatedly demonstrated this behavior in the past, at one point requiring surgery after almost severing his rostrum (snout) when he smashed a large hole in the plastic viewing walls²⁵. There have been similar accounts of apparent dolphin suicide, where dolphins – who breathe voluntarily – have chosen not to take another breath^{26,27}.

Captive breeding is managed or prevented according to the venues' requirements. Inbreeding is a real concern for many facilities because of the artificial group structure and thus natural reproduction is often replaced with artificial insemination. Artificial insemination often requires female dolphins to be drugged with diazepam (the generic of Valium) prior to the procedure²⁸.

In the wild, dolphin calves remain with their mothers for anywhere between three and six years, depending on the species²⁹. At many venues, calves are separated from their mother at far younger ages. Some venues, such as SeaWorld, justify early separation by stating that mother-calf dependencies in captivity are much shorter. They claim this is because calves do not need to learn foraging techniques or predator avoidance behaviors when food and protection are provided for them³⁰.

Although it may sound positive that dolphins do not need to learn how to forage for food or avoid predators in captivity, this is far from the case. Dolphins are complex social animals and their behavioral development throughout their youth covers far more than just predator avoidance and foraging skills. Social behavior, for example, is constantly developed at different ages and requires a healthy family and pod structure. Mental and physical stimulations, including learning how to avoid predators, can lead to the development of diverse and complex behaviors. Removing these stimulations and replacing them with sterile environments such as tanks is detrimental to the welfare of these highly intelligent animals.

Furthermore, the early separation of calves from their mothers makes captive-bred dolphins less likely to survive reintroductions in the wild and, thus, worthless for conservation breeding efforts. Also, the emotional impact that such a separation may have on the mother and the calf is entirely disregarded.

Dolphin science continuously makes discoveries that expand our understanding of dolphins and further demonstrates their complexity. Captive dolphin facilities grossly underestimate this complexity when they claim a dolphin's behavioral development is completed by the age of two or three and use this to justify the removal of a calf from its mother after this age. They also ignore that our understanding of dolphin biology and ecology is still relatively poor and there is so much we do not understand about dolphins yet. This only highlights the fact that the artificial captive environment does not allow for the development and expression of natural behaviors in dolphins³⁰.

Education and conservation claims

The public is growing increasingly aware of animal welfare issues and the problems surrounding keeping dolphins in captivity. As a result of this, some cetacean venues have sought to distance themselves from the notion that their circus-style shows and displays are purely for entertainment purposes. Instead, many venues promote themselves as educational conservation centers, where members of the public can learn about cetacean species. The venues claim that, by visiting them, members of the public can contribute to the conservation of vulnerable marine mammals.

The notion of captive dolphin venues being of value to wild dolphin populations, however, is misleading. For one thing, the species of dolphins commonly used in entertainment venues, such as the bottlenose dolphin, are not endangered. For another, when bred in captivity, these dolphins are not intended for release into the wild. Rather than benefitting wild populations of dolphins, venues engage in captive breeding in order to sustain the captive population. No zoos or aquaria currently engage in captive breeding programs designed to increase wild cetacean populations².

Marine theme parks also promote themselves as generating funds for conservation programs. In reality, as little as five to 10% of zoos, dolphinariums, and aquaria are involved in substantial conservation programs². The public might be impressed when venues donate seemingly large sums of money towards conservation and research, but these figures often represent a tiny fraction of the venue's revenue.

After Virgin Holidays and British Airways Holidays made the commendable decision to stop selling tickets to SeaWorld and other cetacean attractions, SeaWorld's CEO said this would be damaging to conservation³¹. According to their website, since its opening in 2003, the SeaWorld and Busch Garden (SWBG) Conservation Fund has donated over 17 million USD to conservation causes. That's roughly 1 million USD per year³². From 2014 to 2016, SeaWorld Entertainment publicized an average annual donation of 2.2 million USD to conservation, some of which went to SWBG, some of which was donated to other partners³³.

While these figures sound impressive, in 2018 alone SeaWorld Parks & Entertainment declared a revenue of 1.37 billion USD, roughly in line with previous years³⁴. Between 2012 and 2016, SeaWorld Entertainment generated an average annual adjusted net profit of 69 million USD per year³⁵. Based on these figures, their average conservation contribution equals only approximately 3.2% of annual profit - or 0.16% of annual revenue.

Of course, contributing to conservation projects is beneficial. However, it must be questioned whether keeping cetaceans in captivity in a commercial industry is an acceptable - or even necessary - way to generate funds for protecting species in the wild. The ends certainly do not justify the means.

Similarly, some venues promote themselves as assisting wild populations by rescuing stranded animals. These efforts do indeed have a positive impact on individual animals' welfare. This assistance, however, is disproportionately small² given how few cetaceans actually strand alive and are in a state to be rescued. Therefore, although this is a valuable public relations tool, these rescues offer little conservation benefit to wild populations, particularly as the majority of live-stranded cetaceans do not survive to be released.

In the past there have been concerns when rehabilitated cetaceans have not been monitored for success after a release. Allegations have also been made that other suitable candidates for release are instead retained for public display, prioritizing profit over the animals' well-being.

In terms of research, dolphin entertainment venues tend to focus on issues which serve to address problems in their industry rather than on conservation or animal welfare. For example, captive research often addresses health problems or increasing cetacean reproduction in captivity. Dolphinaris Cancun has a breeding program which includes "... the development of new techniques and procedures to record the follow [sic] follicular dynamics, ovulation detection, selection and storage of semen, artificial insemination, ovulation induction and synchronisation of cycles" ³⁶.

All of the above is valuable in maintaining a captive population in inadequate environments, but it does not benefit conservation in any way. Behavioral research, in particular, is questionable with captive subjects due to the constraints put on cetaceans such as small tank sizes and artificial social groupings. These constraints limit their natural behavior and lead to biases in research studies ³⁷.

Reviewing global research contributions at the foremost international conference on marine mammal biology, only five to six percent of studies originate from captive facilities. Most of these facilities are not open to the public, for example, research institutes ². Given the ease of access to dolphins and other cetaceans at those captive facilities, this is a clear indication that marine mammal science generally does not regard captive dolphins at entertainment venues as valuable research subjects.

Despite claims to the contrary by facilities, there is little objective evidence to suggest that keeping cetaceans in captivity is educational. Documentaries or other educational resources that do not rely on captive animals can provide better levels of education. Although some facilities are involved in genuine education efforts, the main purpose of keeping cetaceans in dolphinaris and marine theme parks is entertainment.

The primary aim of these venues is not to educate the public about cetaceans and their habitat. Encouraging visitors to interact with dolphins in cramped, featureless tanks can give little insight into the complex lives of wild dolphins in a natural environment. Most dolphin performances include actions that are portrayed as funny or playful, when in the wild they would often be considered to be aggressive, or signs of disturbance ^{2,38}. In a tightly choreographed performance, it is impossible to provide the audience with a comprehensive understanding of the complex nature of dolphins. Only happy customers will come back, so the general focus of show performances is on entertainment.

Although in some studies survey respondents reported their experiences as educational, the surveys did not test whether learning had actually taken place. In some cases, the audiences remembered the elaborate circus-style tricks that the animals had performed, but not any actual educational information ². In other cases, biases were introduced into surveys, with visitors asked to respond to leading statements such as, "This experience was educational" ³⁹. One study found that there were "no differences in knowledge, attitudes or behavioral intentions" between survey participants at a marine theme park who had viewed dolphins and those in a control group who had not ⁴⁰.

A study assessing Chinese marine theme parks concluded that their primary intent is entertainment. It said that the animals are often portrayed unrealistically in regards to their behavior and life in the wild, ie, these parks are actually providing miseducation to their visitors ⁴¹. In general, there is nothing educational about depicting and normalizing a wild animal in an inadequate and restrictive captive setting.

Nowhere to hide: The design of tanks put the visitors' viewing needs above the dolphins' best interests. There is often no way for dolphins to hide from the attention of visitors. Photo credit: World Animal Protection.



Live capture – damaging wild populations

While dolphin facilities in several countries state they do not acquire dolphins from the wild and rely instead on captive breeding and trading, this is not representative of the dolphin entertainment industry globally. Around the world, dolphins continue to be captured from wild populations for use in marine entertainment venues and dolphinariums.

Dolphins have been – and continue to be – taken from the wild from waters around Cuba, Japan, the Dominican Republic, Haiti, Mexico, Solomon Islands and west Africa, to name only a few locations. In many cases, the status of the wild populations and the threats they are facing are not fully known. What’s more, their ability to recover from having group members caught and removed is not ensured^{42,43}.

Live capture such as this violates the criteria of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES requires exporting countries to verify that removing species in trade (including dolphins) from the wild will not impact the survival of the species. These verifications are known as ‘non-detriment findings’ (NDF)⁴⁴. CITES, however, has no process to assess NDFs for mistakes or false claims².

In Japan, several dolphin species are captured for display and entertainment purposes in controversial hunts known as drives, where dolphins are herded into a cove before being separated. Some of the dolphins will be destined for tanks, while others will be butchered for meat and other products^{2,45}. In the 2017/2018 drive, 541 dolphins were taken from the wild in Taiji, of which 96 were taken alive for the dolphin entertainment industry². All of the bottlenose dolphins captured were taken live – presumably because of their value to the public display industry. It is unclear how many dolphins are being bred in captivity, but with 96 originating from the wild from just one location in one year, it is clear that there is still incentive to capture dolphins.

In Cuba, another hotspot for live cetacean captures, bottlenose dolphins continue to be captured for both domestic and international trade. This is despite the fact there are no publicly reported estimates of wild population numbers^{2,42} and there is insufficient data to understand the numerous threats these dolphins are facing. Any additional removal of dolphins by the cetacean display industry is, by definition, unsustainable and all in the name of entertainment².

Veterinary concerns

When comparing the health of wild and captive dolphins, studies have shown clear differences. Free-ranging bottlenose dolphins (*Tursiops truncatus*) in Florida appear to have a lower risk of developing metabolic syndrome and insulin resistance when compared to their captive counterparts⁴⁶.

The health issues of captive dolphins are thought to be caused by their disrupted behaviors and their feeding regimen, which often consists of a limited diet of frozen-thawed fish in a few large meals. Their wild counterparts, however, were found to consume small portions of varied fish species when necessary. Frozen then thawed fish is the main component of captive cetacean diets, but such fish are lower in nutritional value than live fish². Captive cetaceans usually receive regular vitamin and mineral pills in their fish in attempts to keep them healthy. Frozen fish alone are unable to provide adequate nutrition⁴⁷. Although administering supplements is often marketed as an advantage for captive cetaceans, free-ranging individuals don’t require supplements.

In the wild, dolphins and other cetaceans get all their water content from the fish and squid they hunt. This is not the case in captivity, where their food is lacking in water content after being frozen and thawed. Even when fish species like capelin are used for feeding dolphins due to their high-water content, there is still an ongoing risk of dehydration.

To prevent dehydration, captive dolphins are routinely trained to consume ice cubes or gelatin cubes. Rather than acknowledging that the dolphins risk dehydration and need water supplementation, visitors are often misled by staff who claim that the ice or gelatine is a ‘treat’ or ‘reward.’

In some cases, including where dehydration has already set in and water is urgently needed, dolphins are force-fed with a tube down their throat. At one venue, our undercover investigator witnessed a dolphin calf being force-fed. When queried, staff replied that it was to “ensure it had all the right nutrients in its diet” and that their dolphins were trained for this procedure. This suggested that this was not a rare occurrence.



Food for thought: The frozen then thawed fish fed to the vast majority of captive dolphins is inadequate because it lacks nutrients and water content. Photo credit: World Animal Protection.

Supplements are not the only unnatural addition to a captive cetacean's diet. Marine theme parks know that being handled, being put in new social groups, or being transferred to new facilities are all stressful for cetaceans. Benzodiazepines such as Valium are sometimes given to cetaceans in these situations in order to reduce their anxiety. They are also given for procedures such as artificial insemination

28,48,49

Veterinary records from one marine theme park show that in one case, where a nine-day-old orca calf was the target of aggressive behaviors from two males, the males and the nursing mother were all given diazepam⁵⁰. Drugs such as these should not be given to nursing mothers and may dangerously interfere with the development of the calf.

Prophylactic antibiotics are regularly given to captive dolphins and whales, alongside routine administration of anti-ulcer medications and anti-fungals^{47,51}. Fungal infections are common in captive marine mammals and can be considered as secondary to stress, a compromised environment or other infectious disease⁵².

Captive cetaceans suffer from far more dental problems than their wild counterparts, and a major factor in these is self-mutilation. Bored and frustrated by their captivity, cetaceans persistently grind their teeth against the concrete of their tanks, or bite down on metal bars between tanks, breaking their teeth⁵³. This pattern of repetitive abnormal behavior – a stereotypy – leads to teeth breaking and wearing down to the gums. It is not seen in wild cetaceans².

In some cases, the blunting of the teeth is not caused by the animals themselves. In 2017, at a swim-with-dolphin venue in Bali which is now closed, our researchers found that the teeth of the dolphins appeared to have been filed down by keepers to lessen the impact of bites to keepers and tourists⁵⁴.

According to the U.S. National Inventory of Marine Mammals, as recorded by the National Marine Fisheries Service (NMFS), pneumonia is the most commonly cited cause of death. Usually a secondary condition, pneumonia is often considered to arise through mismanagement⁵⁵.

The levels of chlorine and other caustic chemicals used to disinfect and clear the water in dolphin and other cetacean enclosures is also a serious concern. Monitoring chemical levels in tanks is usually restricted to venue staff. Former cetacean trainers, however, have reported that excessive amounts of chlorine in the tanks would burn their eyes despite them only being in the water for short periods of time⁵⁶. Cetaceans who are in the water constantly can suffer severe health problems if chemical levels are not meticulously monitored and regulated.

Some regulations, however, are non-specific. For example, the Animal and Plant Health Inspection Service (APHIS) in the United States is the agency responsible for implementing the Animal Welfare Act. Their regulations state that enclosures “shall not contain water which would be detrimental to the health of the marine mammal contained therein”⁵⁷. Its outdated, heavily-criticized standards⁵⁸, however, fail to provide guidelines and chemical measurements for ‘safe’ cetacean water. The Alliance of Marine Mammal Parks and Aquariums (AMMPA), the accrediting body and association for international marine theme parks and dolphinariums, has definitive guidelines on marine mammal water treatment protocols. It allows 1 mg/l of total free and combined chlorine, or 1 ppm (parts per million)⁵⁹.

Although country regulations vary, according to the World Health Organization the levels of chlorine considered safe for human swimming pools range between 1 and 3 ppm⁶⁰. At these levels, however, research suggests there are still a wide range of health issues associated with chlorine and the disinfectant by-products (DBP) generated by it. Eye, skin, respiratory problems and cancer have been found to be associated with the chlorination protocols seen at public swimming pools^{60,61}. Whereas a human swimmer might spend a few hours in the water and still be affected by ‘safe’ chlorine levels, the dolphins’ entire lives are spent in such water. Even when the quality is closely monitored and meets standards, there is a clear risk of the animals developing health problems as a result.

Expertise in marine mammal health is crucial when treating the medical issues caused and exacerbated by captivity. Unfortunately, some venues may have reduced access to such expertise, leaving captive cetaceans at risk of inferior medical care or, worse, none at all.

In bad taste: A visitor feeding a captive dolphin at an entertainment park in China. Photo credit: World Animal Protection.



Mortality and longevity concerns

There continues to be fierce debate about the survival rates and longevity of cetaceans in captivity. Marine theme parks such as SeaWorld claim an annual survival rate (ASR) of 0.97 for bottlenose dolphins. This means that 97% of the captive population is expected to survive from one year to the next.

In the context of dolphins at marine theme parks, this statistic is misleading. This survival rate, in fact, only applies in the case of the U.S. Navy's dolphins, who have an ASR of 97.3%⁶². The dolphins there, however, lead incomparably different lives to those in marine theme parks such as SeaWorld.

Navy dolphin activities include regular open ocean swimming, including swimming many miles in a straight line, as opposed to circling in a featureless tank. To retrieve objects, Navy dolphins also dive to depths far exceeding the maximum depth of captive tanks, with the deepest known dive for a Navy dolphin of 300 m. With such different lives, it's grossly misleading to suggest that the mortality rates recorded for Navy dolphins are representative of dolphins at theme parks like SeaWorld.

Although studies have shown improvements in captive bottlenose dolphin mortality rates over time^{63,64}, there is still inconclusive evidence as to whether dolphins in marine theme parks have a higher survival rate than dolphins in the wild. It is very telling that despite so much investment in the health management of captive dolphins at entertainment venues, their dolphins do not live significantly longer than their wild counterparts.

Research claiming captive dolphin survival rates and life expectancies are as high as those in the wild make those claims without data from even reasonably healthy wild populations⁶³. Comparing data from captive dolphins with wild populations which are immune compromised, suffering from exposure to toxic chemicals, and located in areas now affected by oil spills⁶⁵⁻⁶⁸, is stacking the odds unfairly. Without wild data from healthier populations (which do exist, but are not studied well enough to have survivorship data because they are not of conservation concern), these comparisons are biased.

Wild dolphin populations in Florida, which have been the focus of long-term studies, have similar mean ages at death to captive dolphins, eg, 19.9 years⁴⁶ and 25 years⁶⁹. Those populations are in disturbed habitats, however, with threats such as intensive fishing and ship strikes, so higher mean ages at death would be expected in other less disturbed areas. The mortality data associated with the stress of live capture is clear. Capture is incredibly stressful, and the risk of dolphins dying either during and immediately after capture is six times higher than baseline⁷⁰.

For orcas, the data is more conclusive, with annual mortality rates of captive orcas much higher than populations in the wild. Similarly, the percentage of captive orcas who reach sexual maturity and menopause is low compared to their wild counterparts².

Ultimately, however, the mortality rates of captive cetaceans – whether improved, or comparable to some weakened wild populations – can never be a justification for keeping them in captivity. A long life in a tiny, barren enclosure is not a good life.

Human-dolphin interactions

Interacting with cetaceans – predominantly dolphins but also beluga whales – is offered at large numbers of marine entertainment venues. Swim-with-dolphin packages are often promoted as once-in-a-lifetime, dream opportunities for forging connections with incredible animals. The interactions and feeding sessions, however, give the animals no choice in the matter and do not give them the opportunity to withdraw from unwelcome engagement.

Apart from the entertainment aspect, some venues claim that cetacean interactions offer medical or therapeutic benefits to people. Venues which offer swim-with-dolphin packages often promote their activities as being beneficial to human health, both mentally and physically. They offer Dolphin-Assisted Therapy (DAT) as a way to motivate or reward disabled people, particularly children. A review of these programs, however, determined that studies which promote DAT or suggest positive results are methodologically flawed, with dubious validity⁷¹⁻⁷³. Research suggests that DAT is no more effective than using domesticated animals, such as cats or dogs, or even animatronic dolphins⁷⁴. DAT programs, however, have far greater financial costs to humans and considerable negative effects on dolphins.

As well as the high financial costs associated with DAT and other swim-with packages, there are also health risks for both the humans and the dolphins themselves. Studies have shown that exposure to dolphins and other marine mammals can pose human health risks, transmitting serious pathogens including rashes, viral dermatitis, conjunctivitis and fungal infections⁷⁵⁻⁷⁷.

Encouraging the image of dolphins as benign, smiling playmates, the industry ignores their predatory nature. These complex hunters are capable of inflicting serious injuries upon each other and humans. Dolphins at swim-with attractions have been known to seriously hurt humans by butting them. The resulting injuries have included lacerations and broken bones ². Even contact with dolphins outside of the water can result in bite injuries, as the many incidents of children being bitten during feeding interactions demonstrate ^{78,79}.

The venues know about the risks humans face when interacting with dolphins. The liability release forms at marine mammal entertainment venues highlight this, using clear language to indemnify the venue and its employees against lawsuits pertaining to the injury or death of participants ⁸⁰.

As well as the injuries inflicted on visitors by dolphins, direct contact also raises health concerns for the animals. They are exposed to the foreign pathogens brought into their tank through visitors, and at risk of ingesting foreign objects taken from or fed to them by visitors.

A dangerous game: This sample disclaimer from SeaWorld's Discovery Cove in Florida clearly states the risks involved in interactive activities ⁸⁰.

“YOU ARE AGREEING TO LET YOUR MINOR CHILD ENGAGE IN A POTENTIALLY DANGEROUS ACTIVITY. YOU ARE AGREEING THAT, EVEN IF THE RELEASED PARTIES USE REASONABLE CARE IN PROVIDING THIS ACTIVITY, THERE IS A CHANCE YOUR CHILD MAY BE SERIOUSLY INJURED OR KILLED BY PARTICIPATING IN THIS ACTIVITY BECAUSE THERE ARE CERTAIN DANGERS INHERENT IN THE ACTIVITY WHICH CANNOT BE AVOIDED OR ELIMINATED. BY SIGNING THIS FORM YOU ARE GIVING UP YOUR CHILD'S RIGHT AND YOUR RIGHT TO RECOVER FROM THE RELEASED PARTIES IN A LAWSUIT FOR ANY PERSONAL INJURY, INCLUDING DEATH, TO YOUR CHILD OR ANY PROPERTY DAMAGE THAT RESULTS FROM THE RISKS THAT ARE A NATURAL PART OF THE ACTIVITY. YOU HAVE THE RIGHT TO REFUSE TO SIGN THIS FORM, AND THE RELEASED PARTIES HAVE THE RIGHT TO REFUSE TO LET YOUR CHILD PARTICIPATE IF YOU DO NOT SIGN THIS FORM.”

Just in case: At Loro Parque in Tenerife, staff who do 'water work' with dolphins, ie, enter the water with them, carry a cylinder of five minutes' worth of breathable compressed air to be used in emergencies. This highlights the inherent risks involved in working in the water with dolphins. In one Loro Parque show activity, a child sitting in a boat is towed around the tank by a dolphin while another jumps alongside. The safe, 'family friendly' atmosphere that venues such as this strive to portray is in sharp contrast to the need for trainers to carry oxygen in case they are prevented from surfacing.

Growing governmental awareness

People have protested against keeping dolphins and other cetaceans in captivity for decades. This has prompted the closure of dolphinariums in some countries, including the last dolphinarium in the UK in 1992. Although keeping dolphins is not technically illegal in the UK, the standards of care required to legally do so are extremely stringent. This has meant that for the past 27 years, dolphins have been safe from exploitation in the UK ⁸¹.

Governments in other countries have followed suit to varying degrees. The last dolphinarium in New Zealand closed in 2008 and, although keeping dolphins is legal, it's unlikely that new dolphinarium proposals would be welcomed ⁸².

In February 2012, the Greek government banned commercial dolphin captivity, in addition to the use of all non-domesticated animals in circuses. The law now forbids the use of animals in entertainment; however, Attica Zoological Park blatantly ignores the legislation. The zoo claims their dolphin shows are educational rather than entertaining, despite the shows containing the same circus-style content as standard dolphin shows. Tricks include pushing the trainer through the water and acrobatic jumps, with shows two to four times daily depending on the season ⁸³. Despite being fined 44,000 Euros (50,000 USD) for continuing the dolphin shows, along with other environmental protection and licensing breaches, the shows continue ⁸⁴. Given the lucrative nature of the dolphin entertainment industry, the millions of Euros generated by breaking the law far outweighs the penalty fines.

In 2013, the Indian Ministry of Environment and Forests instated a ban on enterprises involving the import or capture of cetacean species for entertainment, exhibition or interaction purposes. The government based this decision partially on its acknowledgement of the belief among various scientists that "... the unusually high intelligence, as compared to other animals, means that dolphins should be seen as 'non-human persons' and as such should have their own specific rights and is morally unacceptable to keep them captive for entertainment purpose [sic]" ⁸⁵.

Most recently, in June 2019, Canada passed a bill banning the capture and breeding of cetaceans and making it illegal to possess cetaceans for purposes other than research or rehabilitation. Bill S-203 is known as the 'Free Willy Bill' in reference to the 1993 movie where a boy frees a captive orca from a life of suffering at a marine theme park. The bill does not apply retroactively, meaning the existing captive cetaceans in Canada can still be legally displayed. However, the breeding ban does apply and thus it ensures that they will be the last generation of cetaceans used for entertainment in Canada ⁸⁶.

Other countries which do not allow the display of cetaceans for entertainment - either directly or due to a trade ban - are Bolivia, Chile, Costa Rica, Croatia, Cyprus, Hungary, Nicaragua, Slovenia, and Switzerland. The U.S. state of California has banned orca captivity, while South Carolina bans the display of cetaceans. Other provinces and cities globally have banned or restricted keeping cetaceans in captivity. Similar to the UK, countries such as Brazil, Luxembourg and Norway have such strict welfare standards that keeping cetaceans would be virtually impossible ⁸⁷ - certainly from a profit-making perspective. The number of governments who recognize that keeping cetaceans in captivity for entertainment is inhumane and unethical is steadily rising, increasing the pressure on this multibillion-dollar industry.

The global dolphin entertainment industry

Scale and character of the industry

In 2018, World Animal Protection conducted desktop and in-country research to identify all publicly accessible facilities that keep dolphin species or other cetaceans in captivity. To achieve this, all entries on the existing database cetabase.org were verified. After that, further facilities worldwide were detected with original desktop research in English, Spanish, Portuguese, Turkish, Chinese, Japanese, Thai, and Russian.

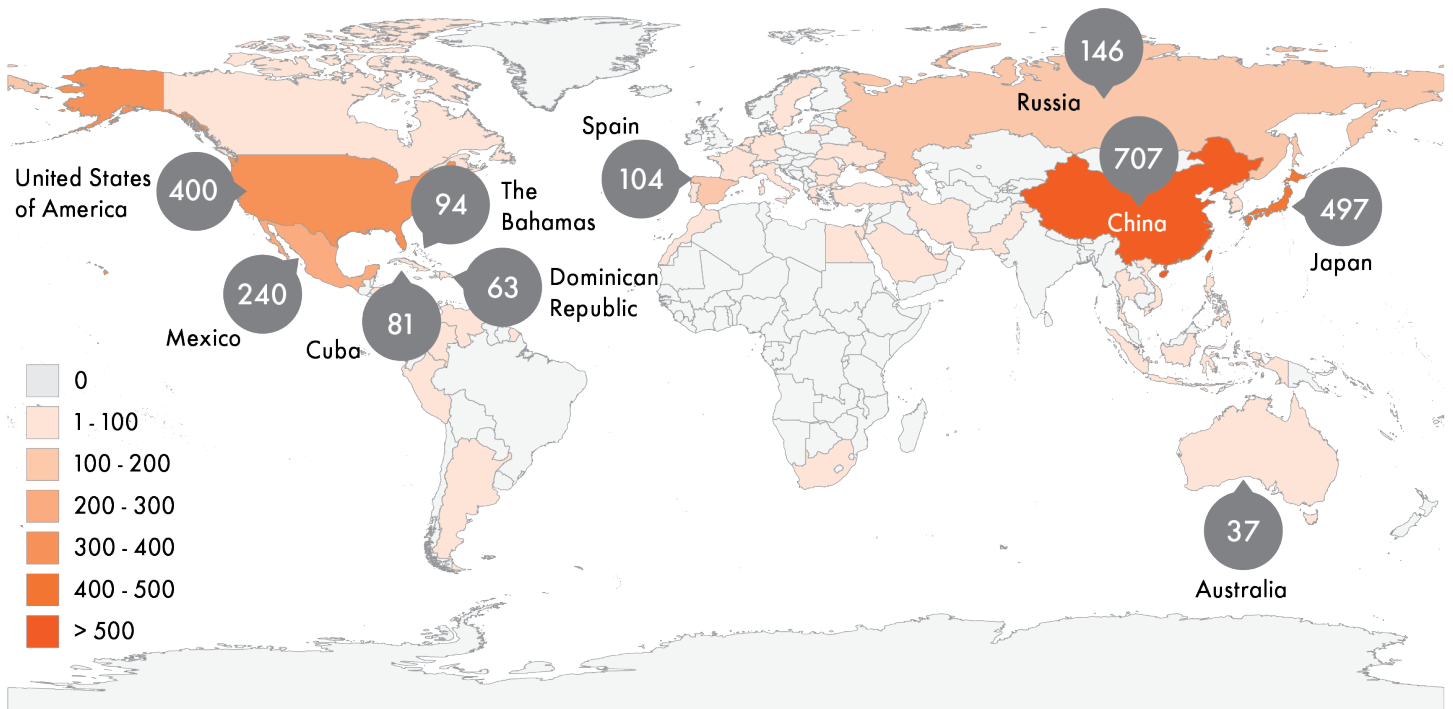
Additional information on dolphin and venue numbers in China was found via the 2019 report on captive cetaceans by the China Cetacean Alliance⁸⁸. Through in-country presence in Brazil, Costa Rica, the United States, Canada, Netherlands, Denmark, the United Kingdom, Sweden, India, Thailand, China, Russia, Japan and Australia, we gathered further information via local networks. About 60 facilities were visited in person in order to gather information and document conditions directly. For the remaining facilities, information on number of animals, exhibits, tank sizes, tourist activities, prices and other aspects was gathered via facility websites, traveler reviews, Google Earth satellite imagery, or information requests to local governments or to the facilities directly. This study can't claim to cover every existing dolphin facility in every country but, to our knowledge, it represents the most comprehensive account of the situation worldwide.

Three hundred and fifty-five facilities that keep cetaceans in captivity for tourism were identified in 58 countries. Of the 3,603 cetaceans inventoried at those facilities, 84% of them (3,029) were dolphin species¹. The most common dolphin species kept are the two bottlenose dolphin species (*T. truncatus* and *T. aduncus*), with 2,648 individuals counted (87% of all dolphins). Other species kept included the Pacific-white sided dolphin, Risso's dolphin, the rough-toothed dolphin, the Atlantic spotted dolphin, the Pantropical spotted dolphin, the Indo-Pacific humpback dolphin, Commerson's dolphin, and the Irrawaddy dolphin.



Home discomforts: A bottlenose dolphin in a tightly choreographed performance – this tank is the dolphin's home all day, every day.

¹ See our definition of the delphinids on which this report focusses, and how the use of the word 'dolphin' is defined, in the box on page 3.

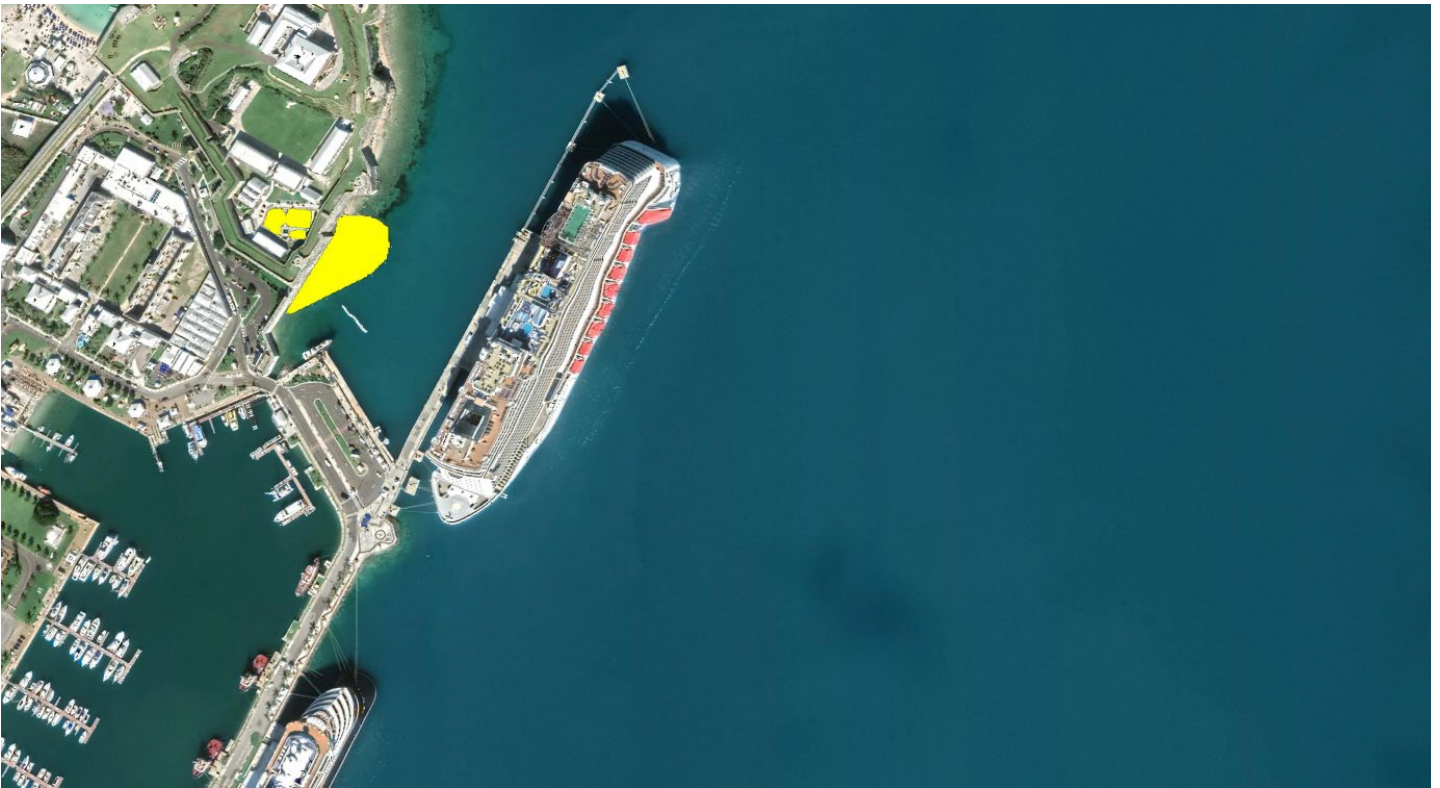


Map of misery: The number of captive dolphins kept at tourism facilities by country, with the top ten countries with the most dolphins labelled. Red dots represent identified dolphin venues.

More specifically, 336 facilities in 54 countries worldwide keep dolphins, making dolphins by far the most commonly kept cetacean family in captivity. More than eight out of 10 captive cetaceans are dolphins. More than 60% of all captive dolphins worldwide are found in just five countries: China (23%), Japan (16%), the USA (13%), Mexico (8%) and Russia (5%).

China, in recent years, has seen a dramatic increase in the number of captive dolphin facilities and, as continuous monitoring of the cetacean numbers show, this rise continues⁸⁹. However, if looking at geographic regions rather than individual countries, the Mexico, Caribbean, Bahamas, and Bermuda (MCBB) region accounts for a significant 19% of all dolphins globally. The highest average number of dolphins per facility in countries with more than two facilities are found in The Bahamas with 23 dolphins. This is followed by the United States with 14 dolphins, and the Dominican Republic with 13 dolphins per facility. The dolphin venues with the top ten largest number of dolphins each keep between 30 and 45 dolphins on their premises, several of which are in the MCBB region.

It may be surprising to discover such large numbers of dolphins are kept in facilities in comparatively small countries such as The Bahamas and the Dominican Republic – and that over one-fifth of all captive dolphins are in this geographic region. However, most dolphin venues operate as commercial businesses and depend on visitors. Mexico and the Caribbean islands are highly frequented by cruise ships and other travel itineraries that often include dolphin interactions.



Top: Dolphinariums in the dock: This large dolphin facility (the yellow-marked areas at the top-left coast) is located directly in a cruise ship terminal. The noise and pollution of the ships is in the immediate vicinity of the facility's sea pens.

Bottom: Room for improvement: The space for the dolphins in this dolphin facility in Mexico (yellow outline) is smaller than two rows of the adjacent car park. For the dolphins, the proximity to the sea here is irrelevant as they never get to see it, let alone experience it.

Dolphin facilities across the world maintain the animals in different ways. Some facilities are located in coastal areas of tropical seas and use sea pens to contain the dolphins. Others are located in urban centers in countries that experience temperatures below 0°C, or in remote areas far away from the ocean (and thus natural seawater). Commonly, facilities in the northern hemisphere use indoor tanks, while facilities in more temperate or tropical climates use either outdoor tanks or sea pens right on the shore.

Of the facilities identified in this research, 95 use only indoor tanks, which means 575 dolphins are kept in conditions where they never experience direct natural lighting or weather in their life. Our research identified 233 dolphin venues keeping 1,770 dolphins (66%) in concrete tanks.

Tanks across venues are significantly smaller than sea pens, reaffirming previous studies that have assessed this⁹⁰. Assessing the size of the primary tank at the relevant venues results in an average surface area of 444 sq m, compared to 1,305 sq m for sea pens¹. 444 sq m is only slightly larger than the average IMAX movie screen of 350 sq m and is smaller than a basketball court.

The reality for most dolphins is an even smaller space, as we've only considered the largest tanks at each venue. Many dolphins are held for the majority of their lives in tanks other than the largest, primary enclosures (the locations where the shows are usually held). For sea pens, the average surface area is about two-and-a-half times the size of a basketball court. In the wild, bottlenose dolphins often have home ranges exceeding 100 sq km², with some populations even in excess of 400 sq km¹⁷. That means that the average sea pen size is about 77,000 times smaller than a dolphin's home range in the wild. Even the largest sea pen this research identified (about 8,000 sq m) is 12,000 times smaller than a dolphin's natural home range. The reality, however, is even bleaker, considering that most dolphins live in tanks and only have a space that's slightly larger than a theater screen – a space that's over 200,000 times smaller than their natural home range.

Dolphin facilities often claim that there is no need for so much space if the dolphins receive all the food they need in their tank. They insist that the only reason dolphins cover so much ground is to look for food. However, dolphins have evolved a metabolism and a behavioral repertoire that require movement and space for so much more than just chasing food.

'Our research identified 233 dolphin venues keeping 1,770 dolphins (66%) in concrete tanks.'

Studies on the activity budgets – the time spent per day on various activities – of wild bottlenose dolphins have shown that dolphin pods spend only about 17% of their time hunting and feeding^{91,92}. The vast majority of their time is spent traveling (50%) and milling (31%). Milling is a term that describes how dolphins frequently switch direction and move in an erratic manner within the same small area.

One could argue that at least some proportion of the dolphins' traveling time could be attributed to moving to various feeding grounds. However, even then, a vast amount of the dolphins' daily activity time involves using their habitat in other ways – much of which we simply don't understand yet.

Dolphins are highly intelligent wild animals who have evolved to move across great distances. To suggest it is acceptable to reduce their habitat to the size of a theater screen simply because sufficient food is provided grossly underestimates their complexity and fails to understand their needs.

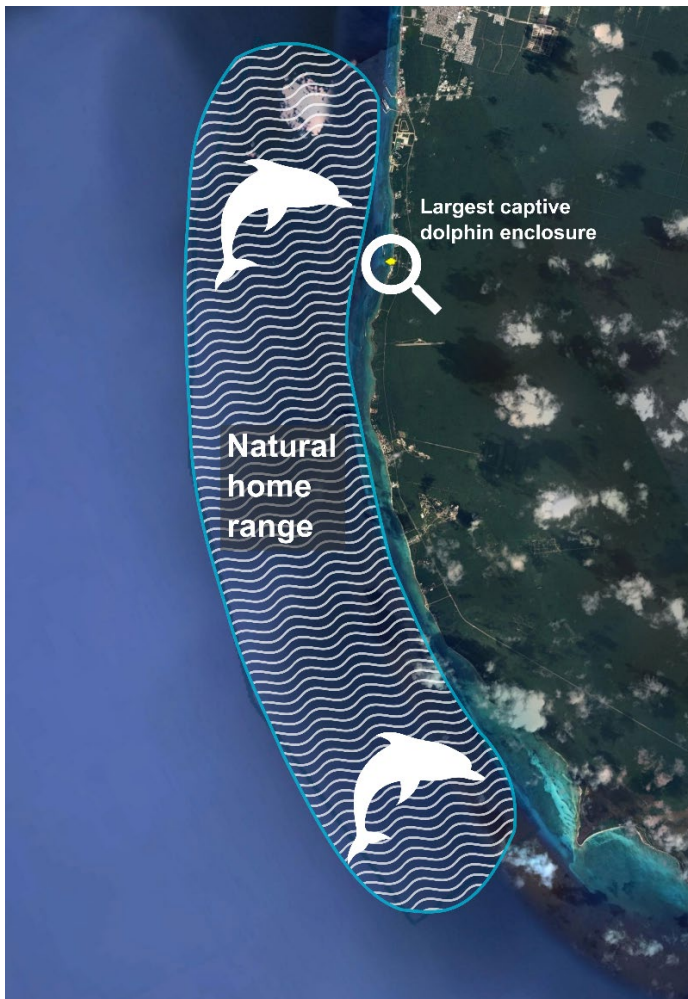
'The reality, however, is even bleaker, considering that most dolphins live in tanks and only have a space that's slightly larger than a theater screen – a space that's over 200,000 times smaller than their natural home range.'

ⁱⁱ Data on tank and sea pen size was derived for 228 of the identified dolphin facilities.

Throughout our research we spoke to several staff members at the venues and in confidence off-site. Many of these trainers and veterinarians care deeply for the dolphins in their charge and put much effort into improving their welfare. A good trainer has a very important role to play in providing any quality of life for captive dolphins.

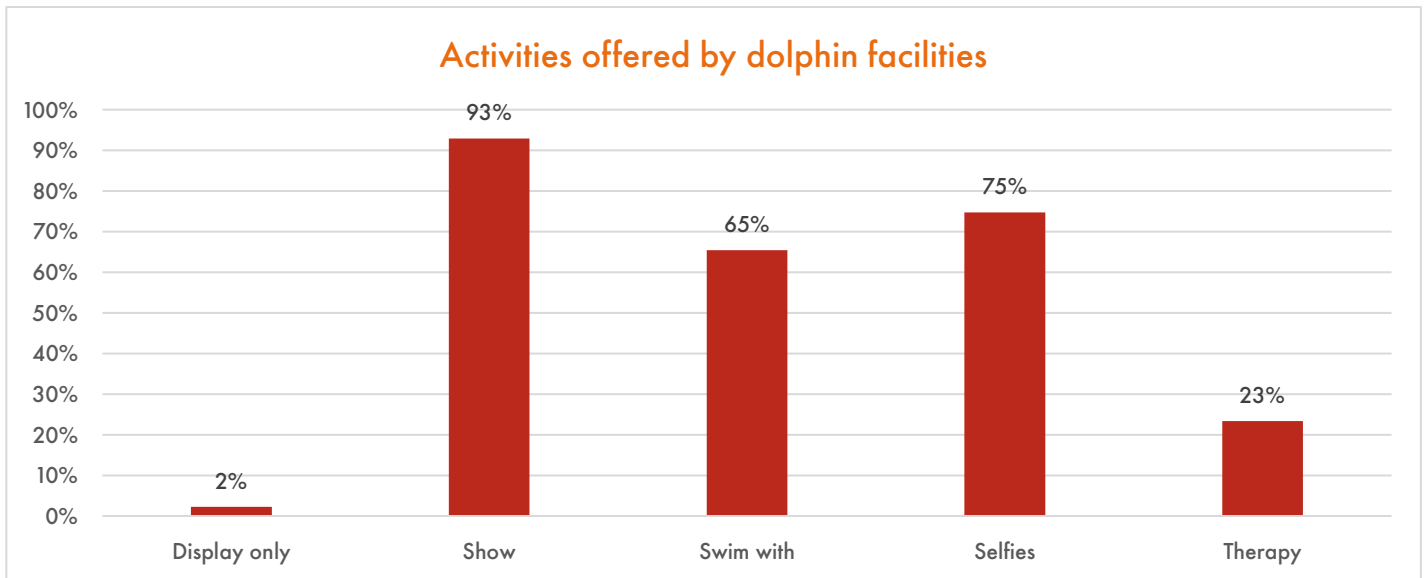
The training of dolphins is mostly carried out through operant conditioning, a method that relies on rewarding the animals for when they perform the wanted action. While public performances and tourist interactions can be stressful, harmful, and rely on methods such as food deprivation, training is often seen as an activity that alleviates the dolphins' boredom. This does not justify performances or tourist interactions, but emphasizes the sad and often depressing situation for captive dolphins.

For many trainers, this puts them in a conflicting situation. They realize that the captive environment is harmful for the dolphins under their care. However, they feel that, while they can't change the situation, their work with the dolphins is the only thing that keeps the animals from becoming depressed. Some trainers in the past have stepped away from their work or become whistle blowers, exposing the inhumane conditions at the venues.



Dolphin venues are commercial enterprises, often operating multiple branches in key tourism hotspots to maximize profits. To attract visitors, various entertainment activities are offered that focus on dolphin performances or interactions. Ninety-three percent of the venues worldwide offer shows with dolphins, while 66% offer swimming with dolphins, 75% offer selfies and 23% offer dolphin-assisted therapy. Only two percent (seven) of the venues claim not to offer any of those attractions and provide display-only experiences to visitors.

Size matters: A comparison between the size of a bottlenose dolphin's home range in the wild (the blue shape, using a conservative estimate of 100 sq km) and the largest identified sea pen for captive dolphins (the yellow speck inside the magnifying glass).



Dolphin shows are often performed in front of large crowds of up to 1,000 people and they may include as many as 12 dolphins. Some venues only offer one show per day, while others offer several. Each show typically lasts between 15 and 30 minutes and includes a variety of tricks that the dolphins are trained to perform. One of the more intensive tricks involves a dolphin pulling a trainer through the water by the dorsal fin. Others involve a trainer standing on a dolphin's back or head or being pushed through - or completely out of - the water by the dolphin's snout (beak).

Old tricks: Propelling trainers out of the water like this endangered Irrawaddy dolphin (*Orcaella brevirostris*) in Thailand is doing, is pure spectacle. Not only does a trick like this offer no educational value, but it is also demeaning and dangerous for the dolphin. Photo credit: World Animal Protection.





The show's never over: Often catering to families, dolphin venues are all about suggesting fun and pleasure – and they achieve this by forcing the dolphins to perform day in and day out. Photo credit: World Animal Protection.

Not only do concerns exist about the demeaning character of these displays, but also about the health risks involved. In addition to potential injuries to the dolphin's skin, fins or snout while interacting with trainers in shows, dolphins have also been seriously injured and even killed while performing tricks².

At SeaWorld's Discovery Cove in Florida in 2008, Sharky the dolphin suffered a fatal mid-air collision with another dolphin⁹³. While at SeaWorld Orlando in 2013, the audience looked on as a pilot whale – one of the largest species of dolphin – was stranded out of the water for 25 minutes. This was, without doubt, a severely stressful situation for the animal⁹⁴.

In 2012, another SeaWorld dolphin was ejected out of the tank entirely⁹⁵. After colliding with its tankmate while performing, visitors witnessed the dolphin bleeding on the deck outside the tank. The incident was only reported the following year, when footage of the dolphin out of the tank was shared by a whistle blower.

Given the reluctance of venues to publish damaging truths about dolphin injuries, it is likely that the frequency of incidents is under-reported. Three out of four venues with dolphin performances were found to include towing by or riding of dolphins by trainers or visitors. A similar concerning behavior is beaching (also known as 'sliding out'), where the animals are trained to propel themselves out of the water onto a stage. Here, the animal spins on its side, wags its tail flukes, gives kisses, wears hats or toy glasses, or does other tricks. As many as 69% of dolphin performances include beaching which, in many cases, displays the animal in demeaning ways.



Top: A bad deck: Dolphins are trained to beach themselves so visitors can touch, kiss and take selfies with them. Some of these sessions keep the dolphins on the deck for almost an hour, especially in Asia where long lines of people may wait to meet the animal. This is stressful and would seem like a stranding to the dolphin – physically and probably mentally too. Photo credit: World Animal Protection.

Bottom: Routine risk: Dolphins perform tightly choreographed tricks during stylized shows, usually accompanied by loud music. Dolphins have died from tricks going wrong. Photo credit: World Animal Protection.

During performances, at least three out of four venues played loud music to provide an entertaining atmosphere for the audience. We measured the volume of the music in shows at 32 venues. On average, the volume was 94 dB with peaks up to 110 dB at some venues.

For people, volumes of 85 dB and above are considered harmful and could lead to hearing loss through sustained exposure⁹⁶. A rock concert is usually 110 dB or louder. Dolphins spend a significant part of the shows with their heads above water and have good hearing in the frequency range of this music. Given the potential harm that this volume could cause the audience, it is probable that these volume levels would at least lead to discomfort for the dolphins and any other animals in the vicinity. Repeated exposure multiple times a day, day after day, may lead to actual hearing damage. It will certainly be just as annoying, disruptive, and even mentally stressful, as plane noise is to people who live near airports.

Venues tend to downplay this noise risk because cetaceans would normally spend most of their lives underwater and sound in the air does not penetrate the air-water interface well. However, captive dolphins, in a complete reversal to natural behavior, spend most of their time at the surface. They usually have their heads (and ears) out of the water as they wait to receive instructions or food. In-air sound exposure thus becomes highly relevant to cetaceans, as they hear perfectly well in air.

Various types of swim-with activities are offered by 191 venues (65%) globally. The encounters are sometimes called 'Swim with dolphins,' 'Dolphin experiences,' 'Dolphin trainer-for-a-day' or 'Dolphin encounters.' The latter, however, often refers to interactions with dolphins without getting into the water.

Taken for a ride: Advertised as magical family fun, visitors are keen to swim with dolphins, unaware of the suffering involved.

Photo credit: World Animal Protection.



Swim-with activities are usually an exclusive activity for individuals or small groups which offer the opportunity to interact with dolphins directly in a tank or a sea pen. The duration of these experiences can be anything from 15 minutes to an hour. During this often high-priced activity, the dolphin is expected to stay in close proximity to the visitor. This allows the visitor to touch them, kiss them, hug them or hang onto their dorsal fin and get pulled through the water. Customers pay for this direct interaction and thus efforts will be made to satisfy their expectations by ensuring the dolphins do not avoid contact. Attempts by dolphins to move away are often thwarted by the trainers who recall them, using fish as a reward for acting against their preferences.

These interactions can potentially be directly or indirectly stressful for dolphins, as they may not be allowed to choose rest or seclusion if that is what they desire. The interactions can also lead to behavioral changes that disrupt the social bonds in a group of dolphins². Also, swim-with activities can lead to visitor injuries, as dolphins can become aggressive or overly energetic during these interactions.

As with other wild animal interactions, usually only young or female animals will be used for swim-with encounters, as adolescent and adult males tend to be overly unruly or aggressive. It thus begs the question: what happens to adult male dolphins at swim-with venues who can't 'pay their way' anymore?

Many countries with dolphin attractions that offer swim-with activities do not have regulations that govern dolphin welfare, health or safety. Furthermore, claims of being educational are not supported by studies that asked participants to recall what they had learned during the experience⁹⁷. Worldwide, facilities that offer swim-with activities house 1,729 dolphins.

Dolphin venues capitalize on the animals in a variety of ways from entry tickets to additional dolphin interaction activities, and from merchandising to food and beverages. Many larger venues also integrate theme park rides, aquariums or zoos, hotels, or casinos and are multimillion-dollar operations.

Entrance prices vary quite significantly across venues, depending on the scale of the operation or its exclusivity. The global average cost for entrance tickets is 34 USD per adult, but venues in North America, Oceania (Australia), the Mexico, Caribbean, Bahamas and Bermuda region, and the Middle East charge on average between 50 to 74 USD per adult for entry. This usually gives access to the show performances and tanks – but not to activities.

Dolphin interaction activities cost extra and by a significant amount. Again, prices vary drastically depending on whether it's about taking a selfie with a dolphin, touching it near the tank, swimming with it or spending an entire day with the dolphin and a trainer. The average price across all activities globally is 115 USD – that's more than three times higher than the price of the entry ticket. The average cost for the highest priced activity of each venue – which is usually a swim-with activity of some sort – is 178 USD per person in a group. However, activity prices can be as high as over 400 USD for a private swim with a dolphin or up to 1,000 USD for spending the day as assistant trainer or booking a 'honeymoon package.'

Venues will naturally aim to maximize their dolphins' profit-generating potential by using as many of them as possible for 'extra' activities or shows. This need to make profits directly conflicts with maximizing dolphin welfare because it puts visitor satisfaction first, rather than the dolphins' needs.

Using the globally derived figures for entrance and activity prices we can conclude that, depending on the frequency of participation in activities, a single dolphin can generate between 400,000 USD and 2 million USD per year for a venue. This means that all the captive dolphins in the tourism industry annually generate between 1.1 and 5.5 billion USD. It is literally a multibillion-dollar industry – and all on the back of the suffering of wild animals.

It must be noted that these figures only refer to the income generated through dolphin activities. Almost all dolphin venues include a range of additional income channels through merchandise, hotels, restaurants, and other businesses leading to multibillion USD revenue margins across the industry.

'All the captive dolphins in the tourism industry annually generate between 1.1 and 5.5 billion USD.'

No. of activities per day	50% use of dolphin	75% use of dolphin	100% use of dolphin
4	USD 421,430	USD 632,146	USD 842,861
6	USD 632,146	USD 948,218	USD 1,264,291
8	USD 842,861	USD 1,264,291	USD 1,685,721
10	USD 1,053,576	USD 1,580,364	USD 2,107,152

Annual income in USD generated by a single dolphin using average activity prices and an average of five customers per activity, displayed by potential number of daily activities and the frequency of using the dolphin (eg, every day (100%) or only every second day (50%).

Interestingly many of the larger venues that offer dolphin interactions are not entirely dependent on the income from the dolphin activity. They could wean themselves off it by further developing other income streams that are not dependent on wild animal interactions or performances.

At least 65% (204) of all dolphin facilities include other consumer-focussed attractions such as theme park rides, swimming pools or water parks, restaurants, museums or zoological exhibitions. While the dolphin business may indeed be a very lucrative branch, many of these venues could likely survive by focussing on their other visitor magnets.

Some existing structures could even be reused. Some dolphin facilities in China, for example, use the dolphin performance tank for water ballet and mermaid shows. Divers in costumes perform with ocean scenery as a backdrop, and visitors watch the underwater movements from an observation deck. Alternative attractions such as rollercoaster rides, however, should be developed responsibly, taking into account the welfare of any animals remaining at the venue.

Animals as assets: Corporate stakes in dolphinarium

Worldwide, a multitude of companies are earning enormous sums of money from dolphin shows and interactions. Some companies invest entirely in dolphinarium, while others feature dolphinarium as only part of their larger portfolio. As calculated in this report, captive dolphins alone generate between 1.1 and 5.5 billion USD annually through visitor activities – and this does not include additional spending by visitors on the premises. The industry-wide profit margins will be significantly higher.

We researched the corporate profiles of selected large-sized dolphinarium in Europe, Mexico, Asia, the United States, and the Middle East, by reviewing published information on the facilities' websites, available databases such as Bloomberg, D&B Hoovers, Forbes, Reuters, and news reports published by international and national agencies such as CNN, MSNBC and national news outlets.

The majority of the dolphinarium we researched are part of larger international conglomerates. Only a very few are independently or family-owned and operated. In fact, some corporations own dozens of dolphinarium and water parks around the world, profiting from different visitor markets. Most of these large, multi-layered businesses stem from mergers and acquisitions of smaller dolphinarium or other water, adventure and amusement parks.

These larger conglomerates, which own or invest in dolphinarium, also own multiple and varied other businesses. They have portfolios that include government relations, healthcare, hotels and resorts, real estate, telecommunications, financial institutions, pharmaceuticals, construction groups, and retail and accessories lines. They also own other adventure, sport, water park and hospitality companies who help manage the dolphinarium.

Financial and industry partners

There is massive international financial backing behind many of these dolphinarium. While a select few are privately owned and privately funded, most dolphinarium have financial backing from internationally recognized institutions, including banks, private equity firms, financial groups and institutional investors.

Investment companies are usually motivated by maximizing the profits of their investments. One financial group that has invested in a major multi-facility dolphinarium company boasts on their website that they invest only in established companies with high profit margins. Other financial companies state that they specialize in turning around underperforming assets. For many investment companies, the dolphinarium portion of their portfolio is a commodity, just like any other aspect of their larger portfolio.

Almost all of the reviewed dolphinarium note their industry partners on their websites. Support from local, national and international government allies, worldwide airlines, oil companies, hotels, real estate and construction groups, retail and accessories lines, hospitality companies, architecture firms and building contractors all play a part in the continued prosperity of dolphinarium. Huge multinational food and beverage companies, celebrity chefs and restaurateurs, as well as large international retail groups and online discount services, were all publicly promoted on many of dolphinarium websites.

The reviewed dolphinarium were commonly connected to travel agencies, tour operators, hotels and resorts, and social media groups. Many noted their strategic alliances with international wholesaler agencies and with cruise line companies. Certification groups and NGO connections were also noted and some dolphinarium emphasized their 'green' partners in order to benefit from those associations. By supporting the venues as sales channels, or by promoting dolphin activities and increasing social license and acceptability in the public eye, the industry partners profit from dolphin suffering.

The majority of the companies that invest in dolphinarium note their corporate social responsibility. These responsibilities include eradicating hunger, enhancing literacy, providing cultural outreach, enriching the communities where they have dolphinarium, and supporting wildlife rescue and recovery. In support of these investors' social responsibility claims, many of the dolphinarium put a focus on children and educational programs, offering private and public schools the opportunity to tour their parks to learn about dolphins at a discount or for free.

There appears to be a huge disconnect within dolphinariums between preaching eco-friendly, responsible behavior that emphasizes the importance of conservation while keeping highly intelligent marine mammals in tanks or pens for the sole purpose of entertainment. The vast majority of dolphins are not endangered, yet breeding programs in dolphinariums are often touted as conservation efforts. While they breed more dolphins for entertainment, they also promote their ocean clean-up activities, animal rescue work or efforts in trying to restore marine habitat.

For dolphinariums and their partners, there seems to be a kind of corporate cognitive dissonance at play. They fail to recognize the disconnect between their principle business purpose and their 'conservation' activities, despite their obvious contradictions. Customers who are there to be entertained also want reassurance that their dolphin activities are not harming the animals. Having ready-made excuses about conservation benefits can help alleviate concerns and guilt about supporting dolphin captivity.

Miami Seaquarium case study

A closer examination of the companies investing in and financially backing marine theme parks reveals the huge economic incentive behind dolphin captivity. Miami Seaquarium (MSQ) in Florida, for example, is owned by California-based Palace Entertainment, which purchased MSQ from Wometco Enterprises in 2014. The purchase was for an undisclosed amount, but a source close to Wometco estimated 30 million USD ⁹⁸.

The venue pays around 2.7 million USD in rent each year to Miami-Dade County ⁹⁹. MSQ has over 500,000 visitors to its parks annually ¹⁰⁰. Since there is no publicly available information on the revenue of the park, if 500,000 annual park visitors paid no more than the general entry ticket price (47.99 USD), MSQ's yearly income would be approximately 24 million USD. With multiple experiences at extra cost, concession stands and merchandise sales, the income potential is much larger.

MSQ's owner, Palace Entertainment, owns 22 parks, most of which are in the United States. Of those parks, MSQ and Sea Life Park in Hawaii have swim-with-dolphin and interaction programs ¹⁰¹ ranging up to 450 USD in price ¹⁰². Palace Entertainment markets itself as "the place to go for family fun." It services more than 14 million visitors annually as one of the largest operators of water parks, theme parks, and family entertainment centers in the United States ¹⁰³.

Palace Entertainment is, in turn, a subsidiary of Madrid-based theme park operator Parques Reunidos ¹⁰⁴. In 2007, London-based investment firm Candover Investments/Arle Capital acquired Parques Reunidos for 1 billion Euros ^{105,106}. In 2010, the 30-year-old investment firm announced it would unwind its assets and return money to shareholders and investors ¹⁰⁷. Arle Capital, a private investment firm that spun out of Candover Capital (owner of Parques Reunidos) considered a flotation of the theme park operator on the Madrid stock exchange in 2014, with a value estimated around 2.18 billion USD ¹⁰⁶.

Parques Reunidos operates 62 parks in countries across Europe, the Americas, the Middle East, and Oceania ¹⁰⁸. Their parks have four key market segments: theme parks, zoo parks, water parks and marine life parks. Their mission, values, and objectives are to "provide unforgettable moments of fun and entertainment for all our guests, offering unique, rich, innovative, creative and safe experiences ... to generate increased value for our shareholders and investors." ¹⁰⁹ There is no false claim of offering conservation or educational benefit - clearly these are not the reasons why any of their parks operate.

The annual revenue for Parques Reunidos was 583 million Euros in 2018 ¹¹⁰. In April 2019, the company was fined a paltry 800 Euros for keeping dolphins in a sub-standard 'human wave pool' for several months. The pool was less than 2m deep and offered no shade ¹¹¹. The disparity between the company's value and this penalty yet again highlights the economic incentive to keep dolphins in inhumane conditions. These minuscule fines for their mistreatment are easily absorbed into 'overhead' costs.

Expansion and diversification

A dolphinarium, like any other business or destination, is subject to changing tastes and trends and needs to adapt its business model accordingly or else it will fail. A clear and responsibly managed transition away from cetacean entertainment to other offerings is commendable. Expansion and diversification without the phase-out of cetacean entertainment, however, does nothing to reduce captive cetacean suffering.

The majority of the dolphinariums we assessed are growing with tourism demand and are supported through major investment. Some others have experienced weak sales or faced public scrutiny on behalf of their dolphin or cetacean activities. With changing consumer attitudes, most companies have plans to add new forms of entertainment, create brand new parks or expand overseas, all to further diversify their offerings. Similarly, venues in countries which have passed legislation making 'business as usual' impossible moving forward are making efforts to 'future-proof' themselves through diversification.

Some companies that faced public scrutiny subsequently closed their dolphinariums. Their dolphins were moved to other locations and the venues were acquired by larger companies or financial groups. These facilities were, in turn, incentivized by new non-animal attractions and activities and have since turned a profit.

Continued growth, with expansion across continents, will require new partnerships for many of the dolphinariums. Governments allowing easy visa entry and companies working closely with the growing cruise line industry have resulted in a whole new market of travelers.

Industry trend

Through our research of companies that own dolphinariums in Europe, Asia, the Americas, and the Middle East, we found that the majority have added other, non-animal attractions to their dolphinarium business structure. This could be to engage more customers for longer stays or it could be because of the realization that wild animal entertainment is increasingly unacceptable to travelers.

The new attractions include water parks, celebrity-owned restaurants, nightclubs, spas, salons, water slides, roller coasters, other amusement park rides, wave pools, kid zone bars and restaurants, and IMAX theaters. It's clear that venues are working to be more than just dolphinariums. It's also notable that the venues making strides towards non-animal entertainment are being recognized for their innovative attractions, and winning awards and praise from travelers.

While dolphinariums may have traditionally focussed solely on dolphin experiences and shows, many companies are now utilizing new partners to create more multifaceted experiences for their guests. This, in turn, creates new revenue streams that are not dependent on wild animal entertainment.

Consumer motivations, behavior and attitudes

Dolphinarium markets

Dolphin shows and experiences remain popular attractions that are in high demand across the world. According to a survey commissioned by World Animal Protectionⁱⁱⁱ, watching a dolphin show is the third most common activity involving wild animals after visiting a zoo or aquarium and viewing wild animals in their natural habitat. The survey showed that 17% of respondents had been to see a dolphin show in the past three years.

In 2019, World Animal Protection commissioned a consumer survey^{iv} of travelers from the United States, Canada, the United Kingdom, China, Brazil, Scandinavia, and the Netherlands. The aim of the survey was to better understand the dolphinarium markets in the four key regions of Mexico, the United States, Spain and the Caribbean. Of those four markets, the United States was the most visited country by travelers that participated in dolphin experiences. Sixty percent had visited a U.S. dolphin venue in the past four years. Florida, home to popular dolphin venues such as Discovery Cove, SeaWorld Orlando and Miami Seaquarium, was a key destination. Unsurprisingly, the United States was the most popular destination for domestic U.S. travelers, but also for 83% of Chinese travelers, 76% of Brazilian travelers and 54% of UK travelers.

Mexico's dolphin venues were visited by 23% of travelers. 18% of Canadian travelers and 15% of Brazilian travelers visited Mexico to engage in dolphin experiences. According to the survey, Cancun Adventures, Dolphin Discovery Cozumel and Delfinito Ixtapa were the most popular venues.

The Spanish market was most popular with British tourists (40%), Dutch tourists (36%) and Scandinavian tourists (36%). Outside of this primarily European tourist preference, 24% of Chinese travelers had also visited Spanish dolphinarium. The most popular venues were Loro Parque in Tenerife, Palmitos Park in the Canary Islands and Marineland in Mallorca.

Only 11% of travelers from these countries had visited dolphinarium in the Caribbean, with relatively balanced popularity across the different countries of origin. The largest proportion of visitors (30%) were from Canada. The top venues in the Caribbean were Dolphin Cove Ocho Rios and Dolphin Cove Montego Bay, both in Jamaica, and Atlantis Paradise Island in The Bahamas.

There were differences in the type of dolphin venues visited in the four key markets. The most frequently visited venue type in the United States were marine adventure parks, which typically include a range of attractions other than dolphin exhibits. In the Caribbean and Mexico, most tourists visited venues that primarily focussed on dolphins – often these relied heavily on interactions such as swimming with dolphins. In Spain, zoo-type venues were much more commonly visited than in the other regions. Here the focus was more on dolphin performance shows in the setting of a zoological park, there were fewer 'hands on' experiences and the entrance fees were lower. In contrast, venues in Mexico and the Caribbean were more likely to offer more expensive, intimate dolphin experiences.

Close to half of the respondents chose to visit these markets specifically to have a dolphin experience. This was particularly true for Chinese, American and Brazilian visitors.

'Sixty percent of the travelers we surveyed across 12 countries had visited a U.S. dolphin venue in the past four years.'

ⁱⁱⁱ 2019, commissioned to Kantar TNS, global online survey of 12,000 people across 12 countries (Denmark, Germany, Netherlands, Sweden, the UK, China, India, Thailand, Canada, the USA, Australia, and Brazil).

^{iv} 2019, commissioned to Flood, consumer survey conducted amongst 2,800 past and potential visitors to dolphinarium in five key dolphinarium markets: the USA, Mexico, the Caribbean, and Spain. Of these 1,309 have visited a dolphin venue in the past four years.

Visitor profile and motivations

According to the results of this consumer survey, the typical dolphinarium visitor is between 25 and 54 years old, university educated, working, and with children.

One striking outcome of the survey was that for over half of those tourists visiting dolphin venues, their motivation arose from a love for dolphins. This shows that although the vast majority of visitors (69%) are university educated, there is a clear lack of understanding of dolphins' needs and how a life in captivity compromises those needs. The dolphin's 'smile' - a result of the shape of its jaw, not its emotional state - paints a skewed picture of life in captivity and contributes to the belief that captive dolphins enjoy a happy life.

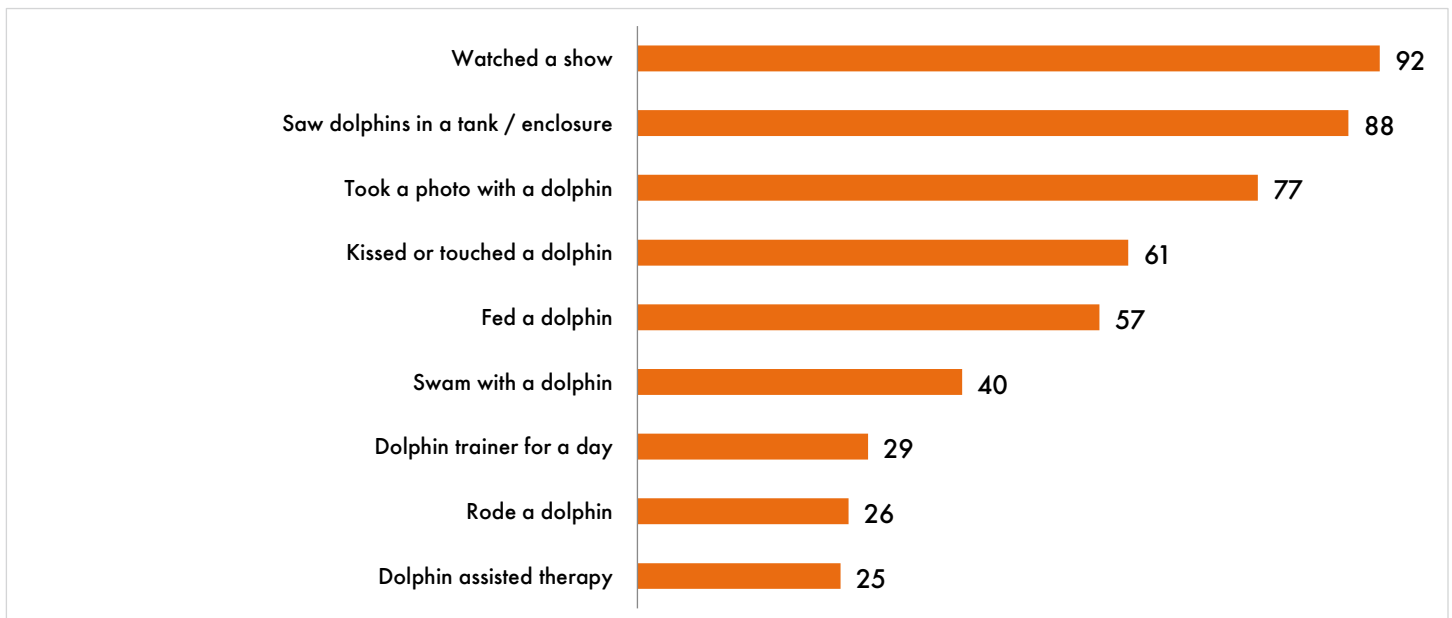
Almost half of people interviewed believed that dolphins' needs can be met at dolphin venues. It can also be assumed that most visitors to marine theme parks go during hot weather months, when the tanks' resemblance to swimming pools must seem tempting to them. Yet this glosses over the deprived environment and the limited size beneath the water's surface.

The second most common reason people visited dolphinariums was family pressure ("My children asked to go."), followed by recommendations from friends and family.

Behaviors

According to the survey, of all the different types of exhibits or activities possible, dolphin performances were seen as one of the most acceptable, followed by watching dolphins swim in a tank. These are also the most common ways for visitors to experience dolphins, with over 90% of dolphinarium visitors having watched a show, and 88% having watched them swim in a tank.

However, direct interactions with dolphins also ranked very high. Three out of four visitors took selfies with dolphins, over half kissed and fed a dolphin, and 40% swam with dolphins. Visitors to Mexico and the Caribbean were more likely to participate in such direct interaction activities. As many as one in three visitors took part in the "Be a trainer for a day" program, while one in four participated in dolphin rides or dolphin-assisted therapy.



A breakdown of activities in which visitors participated while at a dolphin venue (n=1,309)

According to the survey, most visitors to dolphin parks had planned to have a dolphin experience before booking their holidays and chose their destination accordingly. However, this was not true in the Spanish market, where the majority of visitors had acted spontaneously when deciding to take part in dolphin-based activities.

Tour operators and holiday companies play a big part in the industry. One in four tourists visited the dolphin venue as part of their tour package or because it was suggested by their holiday company. The influence of holiday companies and package tours was particularly high among Brazilian and Chinese tourists.

While many visitors to dolphin venues in this survey traveled independently and booked their ticket either directly at the gate or through the venue's website, tickets were also sold through intermediaries. Travel organizations and attraction ticket sellers sell considerable numbers of dolphinarium tickets. The role of this sector is likely to be underestimated, as visitors that self-identify as independent travelers may still use an intermediary to book tickets. Attraction Tickets Direct, for example, is the world's largest attraction ticket broker, servicing customers in Germany, the UK, Ireland and Brazil. The majority of their customers visit attractions in Florida where, since 2008, the company has been an official partner of SeaWorld¹¹².

Attitudes and perceptions

Dolphin venues market themselves using education, research and conservation messaging. This gives visitors the impression that dolphin display is beneficial for wild dolphins and harmless – and even positive – for captive dolphins. These claims have been repeatedly debunked². However, visitors seem unaware that the size and quality of the tanks is a far cry from what the dolphins actually need. They also seem unaware that the dolphins serve a predominantly profit-making purpose – or they choose to ignore this knowledge in favor of a memorable experience.

When visitors express valid concerns, staff are quick to reassure them. During research for the report 'The Show Can't Go On,'¹¹³ our investigators filmed a staff member at SeaWorld San Antonio justify the rake marks on a dolphin's back by telling visitors, "Dolphins communicate using their teeth." To be clear, when under stress or establishing hierarchies in new groups, dolphins do communicate aggression and dominance through raking. However, to imply that this is the general way dolphins communicate is misleading and was clearly meant to justify current or past aggression problems in the group. Similarly, labelling captive dolphins as ambassadors for the species is often a way to justify their use as entertainment, under the guise of conservation.

'Eighty percent of respondents said they would prefer to see dolphins in the wild if they had the chance.'

Likely, as a result of these marketing efforts, of all the activities involving trained captive wildlife, dolphin activities are seen as the most acceptable globally¹¹⁴. Our survey respondents reflected this. Some 55% said that they didn't see anything wrong with going to a dolphin show, while only 42% felt the same for animals other than dolphins. Asian nationalities in particular (Thailand, China and India) and nationalities from the Americas (Brazil, the United States and Canada) found dolphin activities the most acceptable.

Unsurprisingly, our survey of dolphin venue visitors found that 90% of visitors and potential visitors considered some form of dolphin entertainment 'acceptable.' However, acceptability decreased when the level of interaction increased. Swimming with dolphins, kissing or touching them, and riding or being pulled by them are seen as being less acceptable than taking dolphin selfies and feeding them.

Clearly visitors feel much love and respect for dolphins. This is not about not caring, as over half of the respondents want to see dolphins because they love them.

When looking beyond simple acceptability and trying to understand visitor perceptions better, a different picture of the visitor experience emerges. While nearly half of visitors think that dolphin needs can be met in captivity, this contrasts with the 52% who believe they suffer physically and emotionally in captivity. It also contrasts with the 47% of tourists who believe that no dolphin would perform tricks or give rides and kisses to people willingly. Most importantly, 80% of respondents said they would prefer to see dolphins in the wild if they had the chance. Tellingly, one in four visitors said that seeing dolphins in an enclosure felt wrong, and that all dolphin venues should be closed.

'One in four visitors said that seeing dolphins in an enclosure felt wrong, and that all dolphin venues should be closed.'

The role of the travel industry

The travel industry plays a huge role in the continuation of dolphin entertainment. There are hundreds of dolphinariums across the world, and travel companies and brands promote and sell marine mammal entertainment. The global travel and hospitality industry are key sources of bookings and visitors for these dolphinariums, and they help them to maintain their social license^v.

Travel companies, such as booking platforms, travel agencies, travel associations, and tour operators are an essential part of the dolphin entertainment industry. This is particularly the case in regions such as Mexico, the Caribbean, the Bahamas and Bermuda, where many tourists travel by cruise ship and land activities are often booked from the boat. The swim-with-dolphin industry in the Caribbean has arguably been fueled by major cruise lines' desire to give guests memorable, exotic experiences.

Carnival Corporation & Plc., for example, whose companies include Carnival Cruise Line and Princess Cruises, services 11.5 million tourists annually on over 100 ships. It visits over 700 destinations worldwide and, sadly, offers numerous dolphin interaction activities¹¹⁵.

Similarly, many trips sold by international travel companies include dolphin activities, offering a skewed message that dolphin entertainment is a once-in-a-lifetime experience. Dolphin activities are often pitched to the customers at various stages of booking and during travel. Travel companies may sell trips through cooperative marketing models that include dolphin activities. Activities can be pre-booked as an option when booking a more generic trip, and activities can be promoted when arriving at the destination – often through a local representative on a commission basis.

Travel companies usually receive significantly discounted rates for selling tickets to dolphin attractions, to encourage bringing larger numbers of customers. This mutually beneficial and lucrative relationship generates important revenue for the travel company. It also has significant benefits for the dolphin venues they do business with. Not only do travel companies act as sales channels ensuring booking levels to dolphin facilities are consistent and predictable, but the facilities also benefit from the marketing power and endorsement of trusted travel brands.

We reviewed the travel products sold by 31 of the leading travel companies to see if they included any of the top ten largest dolphin facilities that we identified.

Two out of three of those companies offered at least one of the ten largest dolphin facilities in their products, while some offered up to eight of these venues. All but one of the top ten dolphin facilities were among the products sold by the reviewed travel companies.

The sole facility that wasn't sold by any company is in Japan and is closely associated with the cruel 'drive fisheries.' During these drives, wild dolphins are herded into a cove near the village of Taiji where some are set aside alive for sale to dolphin venues while the rest are slaughtered for meat or fertilizer or released. It is clear that this immediate association with dolphin slaughter and trade may be a little too uncomfortable for the reviewed travel companies. However, many of the dolphins caught as part of these drives or elsewhere may end up being traded to facilities that these companies promote.

'Two out of three of 31 leading travel companies offered at least one of the ten largest dolphin facilities in their products, while some offered up to eight of these venues.'

^v Social license to operate refers to the acceptance granted to an organization or company by various stakeholders who may be affected by the company's activities. As opposed to the formal regulatory and legal licenses required to operate a business, it is an informal 'license' based on winning or losing trust, confidence and credibility.

Expedia Group was one of the companies that offered not only most of the top ten dolphin facilities, but many more besides. A total of 32 dolphin facilities across many countries were offered by one or multiple companies belonging to Expedia Group. Thus, Expedia Group's ticket sales to these facilities alone help sustain the keeping over 500 dolphins in inhumane conditions. They are a significant driver of the dolphin industry.

Expedia Group is considered to be one of the world's largest travel technology companies with an estimated 2018 sales volume of over 99 billion USD. Its portfolio includes well-known brands such as Hotels.com, Hotwire, Travelocity, Orbits, CheapTickets, and Expedia CruiseShipCenters¹¹⁶. The latter brand did not name the dolphin venues that are visited during cruises, but we identified 23 dolphin encounter offers across various cruise destinations sold on Expedia CruiseShipCenters.

Eleven companies did not sell any of the top ten dolphin facilities, although other dolphin facilities might be found in their product lists. However, at least a few of these 11 companies have developed progressive policies that avoid all – or at least the worst – captive wildlife activities. Recent additions to the list of progressive travel companies are Booking.com, Virgin Holidays and British Airways Holidays. In 2019, these companies all announced policies of not selling or promoting captive dolphin and whale attractions.

These recent positive developments are in line with the latest research looking at the Canadian travel industry by Bannikin Travel & Tourism. This found that progressive companies recognized that North American consumer demand is shifting on the use of wild animals for entertainment. These progressive companies expressed a desire to stay in step with trends or, better yet, be ahead of the curve. They cited strong scientific evidence of animal suffering, changes in laws governing animal attractions, internal innovative leadership, and changes in demand from travelers as the most influential factors in their decision-making process regarding animal welfare.

'Recent additions to the list of progressive travel companies are Booking.com, Virgin Holidays and British Airways Holidays. In 2019, these companies all announced policies of not selling or promoting captive dolphin and whale attractions.'

Solutions

It's a tragic reality that for the majority of captive dolphins, seaside sanctuaries or releases into the wild are unlikely to be viable solutions. Seaside sanctuaries require significant funds and access to geographic locations suitable for such facilities, which limits their capacity. Releases into the wild have been partially successful but require careful selection of release candidates and release sites.

Ric O'Barry's Dolphin Project and others have been working with local partners in several countries on release projects, eg, with Jakarta Animal Aid Network in Indonesia and Korean Animal Welfare Association in South Korea ¹¹⁷⁻¹¹⁹. However, captive-bred dolphins in particular are currently not suitable for release. This is because their artificial upbringing restricts their natural development and skill set. However, continuing captive breeding programs merely to replace animals who die or increase captive numbers is an unacceptable option because of the inherent suffering involved. So too is continuing the cruel capture of wild dolphins for display.

Given the fundamental welfare problems associated with cetacean captivity, it is crucial that we see an end to the captive breeding and wild capture of dolphins. Only these measures will ensure that the current generation of captive dolphins will be the last to suffer in tiny tanks and pens. Along with such measures, activities where dolphins are used to perform or interact with humans should end. They should be replaced with behavioral enrichment activities that are more in line with their biological needs and natural behaviors than governed by misguided customer satisfaction.

Wherever possible, welfare standards for captive dolphins should be strengthened, particularly with regard to enclosure sizes, diet, socialization, the prevention of breeding and environmental enrichment. Of course, since dolphins' needs can only be fully met in the wild these improvements will remain a compromise and can in no way justify the continued keeping and breeding of cetaceans in captivity. However, they would alleviate the worst suffering while the captive dolphin population gradually declines.

Positive progress

Demand for dolphin entertainment has wavered as the public and the travel industry become more aware of the inhumanity of using cetaceans for entertainment. This, combined with prohibitive legislation in an increasing number of countries, has prompted some venues to take positive steps forward. These have included phasing out or stopping shows and interactions, ending captive breeding and transferring animals to seaside sanctuaries.

At Vancouver Aquarium, the single remaining Pacific white-sided dolphin will be the last cetacean to be displayed at the venue. After protracted legal battles with the Vancouver Park Board, which voted to prohibit the import of new cetaceans to the venue, the aquarium has signed a new 35-year lease and reaffirmed its commitment to not keeping cetaceans for display. It will instead focus more on conservation and research ¹²⁰.

The National Aquarium in Baltimore in the United States stopped its dolphin show in 2012 ¹²¹ and has pledged to transfer its seven bottlenose dolphins to a sanctuary by 2020. This target date has been pushed back due to difficulties in identifying a suitable location in regions facing increasingly severe weather due to climate change ¹²². In a welcome step, Virgin Holidays offered to invest in this project in recognition of seeking solutions to a problem for which the travel industry has some responsibility. The dolphins are being trained for the move to accustom them to stimuli they are likely to encounter in the tropics. The aquarium's recognition that the dolphins should stop performing and relocate to a sanctuary is very welcome.

Cetacean shows have ended or been modified at other venues too, as scrutiny has increased, and consumer demand has decreased. The grand, theatrical orca shows at SeaWorld's parks have ended ¹²³. The 'Orca Encounter' shows which have replaced them are clearly more focused on educational content. They still, however, include tricks such as beaching accompanied by tail raises, jumps and backflips - and all to a loud soundtrack ¹²⁴. Unfortunately, SeaWorld has yet to address concerns with their other cetacean shows ¹²⁵ which feature trainers riding on the backs of beluga whales, foot pushes, and high intensity acrobatics from dolphins ^{113,126}. Although the company ended captive orca breeding in 2016 - a step in the right direction - other whales and dolphins continue to be bred into a lifetime of suffering.

More positively, since August 2018, Dolphin Marine Conservation Park (DMCP) at Coffs Harbour, Australia, has been working with World Animal Protection and Action for Dolphins to investigate creating a seaside sanctuary for their dolphins. World Animal Protection is funding a study to explore the engineering, economic and animal welfare feasibility of this project. The welfare study, conducted by an independent dolphin expert, has already concluded that the welfare of the dolphins would be improved if moved to a seaside sanctuary. If the feasibility study supports a sanctuary to be in the animals' best interests, DMCP has agreed to transfer the dolphins to one. Terry Goodall, DMCP's managing director, has acknowledged changes in public attitudes, stating, "Having whales and dolphins and belugas, other marine mammals in captivity is not publicly accepted these days." In March 2019, DMCP announced they would no longer breed their dolphins ¹²⁷. However, shows and direct interactions with the public continue.

In June 2019, two beluga whales from Changfeng Ocean World in Shanghai, China, were moved to the world's first cetacean seaside sanctuary in Iceland. The whales, Little Grey and Little White, were originally used in shows and direct visitor interactions, but were given hope for a better future when the venue was purchased by Merlin Entertainments in 2012 ¹²⁸. The company, which has a policy against holding captive cetaceans, decreased the number of beluga performances before stopping them completely in February 2019. The sanctuary, in a large, enclosed bay on the island of Heimaey, was developed by the SEA LIFE Trust in collaboration with Whale and Dolphin Conservation. It will provide a more natural environment for the belugas to for the rest of their lives ¹²⁹.

Such positive steps in the right direction are becoming more commonplace. It's clear that businesses that currently profit from dolphin and other cetacean entertainment must make significant changes and be held accountable for the welfare of the animals in their care.

The future of dolphin venues without dolphins

Improving conditions for dolphins and ensuring this is the last generation at entertainment venues is only one part of the solution. Dolphin venues that have invested heavily in their infrastructure must be encouraged to offer activities that aren't based on animal suffering, while still generating profit and entertaining visitors. Some enterprises will be more affected than others - our research encountered a large number of theme park venues offering dolphin attractions as only one of many available activities. For these businesses, it would be comparatively easy to shift entirely away from housing dolphins.

Other more dolphin-focussed venues can still find their way out. As scrutiny of captive cetaceans has increased, some cetacean venues are already attempting to 'future-proof' their businesses by diversifying their attractions. This study found that 65% of facilities included attractions not based on dolphins or other cetaceans.

Since Canada passed a breeding ban on captive cetaceans, for example, Marineland in Ontario announced the opening of a new 6 million CAD Arctic-themed water park called Polar Splash ¹³⁰. Designed to appeal to families, the water park will help to retain customers as the venue's 50 or more belugas age and die and individuals are not replaced.

The smart companies recognize that diversification away from inhumane cetacean exhibits is key to surviving. Measures such as these are welcome if developed responsibly, with due consideration for the remaining animals' welfare.



Branching out: The water slides and other non-cetacean attractions seen at this venue are a step towards the eventual replacement of inhumane dolphin entertainment if developed responsibly, with due consideration for the remaining cetaceans' welfare.

People power and the travel industry's responsibility

Our consumer survey shows that people visit dolphin venues because they love them, and that people are largely unaware of the life of suffering endured by dolphins in captivity. After hearing how dolphins suffer in captivity, almost half of respondents (48%) suggested they would be more likely to agree that venues should be closed.

The public have the power to stop the exploitation of dolphins in several ways. Consumers can make a huge difference by not buying tickets and by advising travel companies that they disapprove of their involvement in the captive dolphin industry – particularly on social media. Decreasing the sales of tickets decreases the economic incentive to breed and capture more dolphins, thereby reducing the number of dolphins facing a lifetime of suffering in captivity.

While some travel companies acknowledge that demand from customers for captive dolphin experiences is dropping, others will claim that demand remains strong. This is no doubt largely due to customers being unaware of the cruelty they are supporting. This is partly because of the misinformation and marketing messages conveyed by the dolphin entertainment industry and their travel industry partners. However, as the truth behind the dolphin 'smile' and the dolphin entertainment industry becomes increasingly exposed, the demand from customers will drop.

The travel industry's claim that they are simply responding to consumer demand by selling tickets paints a skewed picture and passes the burden of responsibility onto the consumer. In fact, the travel industry in many ways is creating that demand in the first place. When marine theme parks are promoted by well-known travel brands who advertise the activities as magical family experiences, it sends a false message to the public that these attractions are acceptable.

By associating with marine theme parks, travel organizations transfer credibility and social license to the venues. Travel organizations need to take responsibility for the role they play in not only fulfilling consumer demand but creating it. While marine theme parks are attempting to 'future-proof' themselves as a result of already changing trends, travel organizations need to be more proactive. For the sake of the dolphins and other cetaceans languishing in captivity, travel organizations cannot afford to wait for consumer tastes to change while continuing to promote dolphin venues.

We applaud those companies who have already disassociated themselves from inhumane cetacean attractions, such as Booking.com, Virgin Holidays and British Airways Holidays. By taking a strong ethical stance against this cruelty, they have shown both the travel industry and members of the public that it is unacceptable to keep dolphins and whales captive for entertainment.

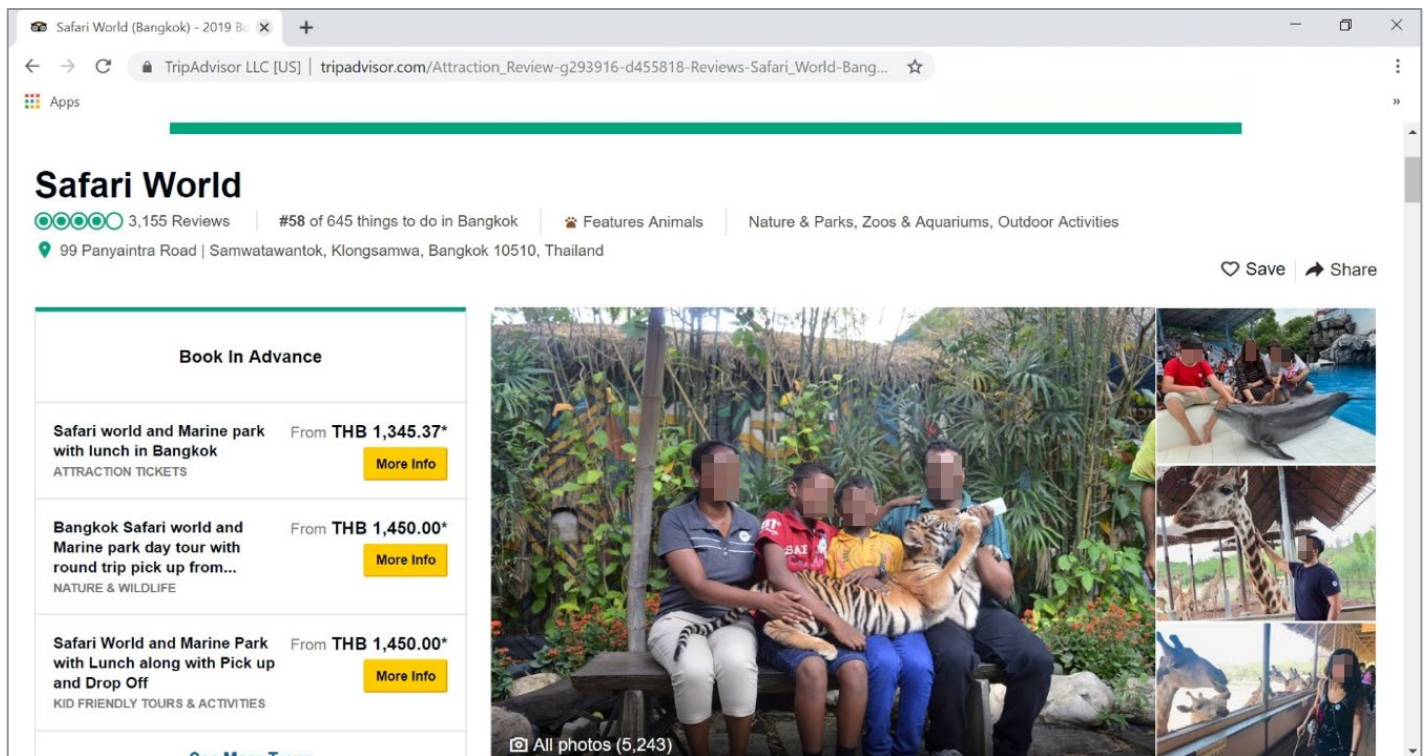
However, in some cases, travel industry pledges to 'do better' in terms of animal welfare are not consistently put into practice. This is particularly relevant for non-traditional travel organizations such as TripAdvisor. Although the company officially pledged to stop selling tickets to cruel or inhumane wildlife interaction attractions in 2016¹³¹, in reality, they are still profiting from cruelty.

As of August 2019, tickets to Safari World in Bangkok, for example, are still being sold on the TripAdvisor websites. This is despite the fact the venue offers direct interactions with wildlife – a violation of the company's 2016 promise. Visitors can feed tiger cubs, touch and take selfies with orangutans and watch an elephant show, a dolphin show and an infamous orangutan boxing show¹³². TripAdvisor also sells tickets to Namuang Safari Park in Thailand where visitors can ride elephants, watch them perform in shows and feed tiger cubs. This is despite the venue having a 53% 'terrible' rating by visitors, who have left countless negative reviews regarding the animal abuse and cruelty they have witnessed¹³³. Tickets are also sold for Zoo D'Amneville in France, which has been awarded a TripAdvisor 'Certificate of Excellence' despite featuring an inhumane tiger show¹³⁴.

Where companies like TripAdvisor gain positive media attention by publicly banning sales to cruel or inhumane attractions¹³⁵, they must follow through in practice. They must not openly break their own pledges to profit from wildlife exploitation.

The most responsible travel organizations do not only *pledge* to ban inhumane dolphin entertainment, but proactively and effectively *implement* the bans. Building on this, World Animal Protection urges travel organizations to develop and implement policies which are committed to promoting responsible alternatives in the wild. Progressive examples of this include the collaboration between the World Cetacean Alliance (WCA) and Virgin Holidays. The company has committed to become the world's first large tour operator to offer best-practice wild whale and dolphin watching. This includes applying WCA guidelines to ensure the welfare of the cetaceans always comes first¹³⁶.

'Travel organizations need to take responsibility for the role they play in not only fulfilling consumer demand, but creating it.'



Hollow promises: Despite pledging to stop selling tickets to cruel attractions in 2016, tickets to places like Safari World in Bangkok could be still bought on TripAdvisor in August 2019.

Responsible alternatives for travelers

We noted earlier that 80% of actual and potential dolphin venue visitors would prefer to see dolphins in the wild. In principle, observing dolphins in the wild is more responsible than observing them in captivity – if managed and implemented responsibly and appropriately. In the wild, dolphins are completely free, live in their natural habitat, and can undertake all of their natural behaviors, such as hunting, foraging, resting, playing and traveling.

Dolphin watching tours can be incredibly rewarding and usually provide a much more compelling opportunity for conveying conservation messages to tourists. However, irresponsible tour operators can cause significant stress or even injuries to wild dolphins. They can approach dolphin pods with too many boats, get too close, go too fast, or fail to inform their visitors about appropriate behavior.

Similarly, swimming activities with wild dolphins should be discouraged. At the very least, they must be carefully managed to prevent swimmers from approaching dolphins or doing anything that intrudes or negatively affects the animals. Any direct interaction between tourists and dolphins such as touching is unacceptable both in captivity and in the wild.

When seeking out responsible wild dolphin activities it is crucial visitors choose operators that follow stringent guidelines or have been accredited or certified through professional organizations that have the dolphins' well-being at heart. The following organizations provide guidelines and accreditation or certification processes for tour operators that ensure responsible practices. This is not a complete list but gives a good overview.

Organization

Weblink

Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic (ACCOBAMS)

accobams.org/conservations-action/cetacean-watching/

Be Whale Wise

bewhalewise.org

Whale & Dolphin Conservation Society

whales.org/our-4-goals/create-healthy-seas/whale-watching/

World Cetacean Alliance

worldcetaceanalliance.org/certification/global-guidelines/
and
whaleheritagesites.org

Of particular interest here is WCA's initiative to develop Whale Heritage Sites. This accreditation certification will be destination-based rather than tour operator based. It will make it considerably easier for travelers to choose responsible activities when visiting each Whale Heritage Site destination. For regions and countries that acquire this accreditation certification, it will also likely be an attractive tourism marketing tool. What's more, it will be a useful tool for working with large travel companies that need to know about responsible wildlife tourism products at destination scale.

Conclusion

This report outlines the massive scale and profitability of the multibillion-dollar dolphin entertainment industry. It highlights its links with the corporate investment industry and the suffering of more than 3,000 dolphins for the money that is made from their labor.

Tourists still find dolphin shows highly acceptable tourism products. This is due to the industry's misinformation about conservation and welfare, the fun and family-oriented branding, and the widely misinterpreted dolphin 'smile.' There are, however, indications that the tide is turning, as a growing number of people and companies reject such attractions.

Incremental improvements to dolphin welfare alone will not do. The issue of space and an artificial, captive environment devoid of anything natural is so fundamental that a solution premised on maintaining the status quo is unacceptable. There must be no future generations of captive dolphins.

The most important step necessary for the long-term protection of cetacean welfare is an end to captive breeding and wild capture. Government bans on the keeping, breeding and trading of captive cetaceans, and travel industry leadership and change are both critical. This is particularly true in cases where regulation is absent or regulatory failure is the norm.

Rather than taking captive dolphin attractions off sale, travel companies may suggest supporting efforts to phase out dolphins in captivity by asking suppliers to commit to no further breeding or importation of wild animals. While this may be an attractive idea in principle, in practice we believe that if this could be achieved then it would have been achieved already. Travel companies that have decided to end their relationships with captive dolphin facilities have done so due to the lack of progress within the dolphin entertainment industry and the growing body of scientific evidence that suggests captive cetaceans have poor welfare. A travel company asking a facility to end the captive breeding or import of animals while continuing to supply tourists to that attraction is futile. It is essentially a request for a facility to abandon its current business model, but lacks the economic pressure to drive the change to a new business model. It sends a very mixed signal and gives facilities no incentive to end breeding or capture.

It can't be stressed enough that every ticket to a dolphin venue sold by a travel organization and purchased by a member of the public contributes to the suffering of dolphins. Each ticket gives venues the economic incentive to breed and capture more dolphins, and each dolphin bred represents another 20 to 30 years of individual suffering – sometimes even longer. Like any other business, the dolphin captivity industry is based on supply and demand.

Decreasing the customer supply, social license and acceptability of venues through their association with widely-known and well-established travel organizations, top-end hotels and cruise companies is key. Travel organizations must also stop offering activities involving dolphins, as this contributes to the public assumption that these activities are acceptable. The public is still largely unaware of the cruelty involved in dolphin entertainment and the tactics used to mislead visitors. With the publication of this report, travel companies have been put on notice, and those that continue to sell inhumane dolphin entertainment do so knowingly.

Most importantly, the consumer survey shows that people visit dolphin venues because they love these animals, and that people are largely unaware of the suffering endured by captive dolphins. After hearing how dolphins suffer in captivity, almost half of the respondents (48%) suggested they would be more likely to think exhibits and attractions should be closed. Consumers have the power to stop the exploitation of dolphins simply by not buying tickets or holidays with the travel companies that promote them.

While some travel companies acknowledge that the demand from customers for captive dolphin experiences is dropping, others will claim that the demand remains strong. This is, no doubt, largely due to customers being unaware of the cruelty they are supporting. And this is, in part, because of the misinformation and marketing messages that are conveyed by the dolphin entertainment industry and its travel industry partners. However, as the truth behind the 'smile' of dolphins and the dolphin entertainment industry becomes increasingly exposed, that demand from customers will drop.

Sadly, the options for existing captive dolphins are limited, but some improvements can be made on site by replacing visitor interactions with genuine dolphin-welfare focussed husbandry practices. Some dolphins may find a place in existing, or soon-to-be developed, seaside sanctuaries and some, in carefully considered cases, may even be reintroduced to the wild. Ultimately, the status quo must change to ensure that the current generation of captive dolphins is the last one suffering in this industry.

Travel companies have a responsibility to review their offers and choice-edit on behalf of the unaware consumer. Simultaneously, consumers need to be engaged to look behind the dolphin 'smile' to better understand the needs of these species and realize that they cannot be met in captivity.

The best way to have an experience with dolphins is to view them responsibly in the wild. This should be done through a responsible operator that is accredited by the World Cetacean Alliance, or a similar organization that has the well-being of dolphins at its heart. This way, we can ensure tourists are not harming dolphins, dolphins are not harming tourists, and the public is seeing these animals for what they truly are: wildlife, not entertainers.

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Appendix 1

Dolphin venues and dolphin numbers identified through this study. This table does not include data by third parties, eg, data on cetacean venues by the China Cetacean Alliance⁸⁸. Numbers may have marginally changed since the research period, due to dolphin births/mortalities.

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Mar del Plata Aquarium		Argentina	Buenos Aires	9
Mundo Marino		Argentina	San Clemente del Tuyú	13
Dolphin Marine Conservation Park		Australia	Coffs Harbour	5
Sea World		Australia	Gold Coast	32
Atlantis Paradise Island		Bahamas	Nassau	44
Balmoral Island		Bahamas	Nassau	10
Dolphin Encounters		Bahamas	Nassau	26
Dolphin Experience		Bahamas	Freeport	14
Dolphin Park, Bahrain		Bahrain	Bahrain	2
Boudewijn Seapark		Belgium	Brugge	8
Dolphin Quest Bermuda		Bermuda	Ireland Island	10
Dolphin Discovery Tortola		British Virgin Islands	Tortola - Road Town	15
Festa Dolphinarium Varna		Bulgaria	Varna	5
Marineland Canada		Canada	Niagara Falls	5
Vancouver Aquarium		Canada	Vancouver, BC	1
Fuyang Marine Culture and Technology Museum	阜阳海洋馆	China	Anhui,Fuyang	2
Hefei Polar Ocean World	合肥汉海极地海洋世界	China	Anhui,Hefei	4
Beijing Aquarium	北京海洋馆	China	Beijing	5
Chongqing Leheledu theme park	重庆乐和乐都主题公园	China	Chongqing	6

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Chongqing Hanhai polar ocean world	重庆汉海极地海洋公园	China	Chongqing	2
Tianzhushan Happy Ocean World	天柱山欢乐海洋大世界	China	Fujian, Zhangzhou	22
Luoyuan Bay SeaWorld	罗源湾海洋世界	China	Fujian, Fuzhou	4
Wuyishan polar Ocean Park	武夷山极地海洋公园	China	Fujian, Wuyishan	3
Xiamen Underwater World	厦门海底世界	China	Fujian, Xiamen	3
Dongguan Xiangshi Zoo	东莞香市动物园	China	Guangdong, Dongguan	4
Guangzhou Ocean World	广州海洋馆	China	Guangdong, Guangzhou	8
Xiaomeisha Sea World	小梅沙海洋世界	China	Guangdong, Shenzhen	8
Shenzhen Wild-life Zoo	深圳野生动物园	China	Guangdong, Shenzhen	5
Chimelong Ocean Kingdom	珠海长隆海洋王国	China	Guangdong, Zhuhai	32
Nanning Zoo	南宁动物园	China	Guangxi, Nanning	4
Colorful Guizhou City Polar Ocean World	多彩贵州城极地海洋世界	China	Guizhou, Guiyang	6
Zunyi zoo	遵义海洋馆	China	Guizhou, Zunyi	4
Wanning Boundary Dolphin Island	分界洲	China	Hainan, Sanya	16
Atlantis Sanya	三亚亚特兰蒂斯水世界乐园	China	Hainan, Sanya	10
Ocean Park	中赫海豚湾海洋公园	China	Henan, Luoyang	4
Xinao Underwater World	新澳海底世界	China	Hebei, Qinhuangdao	2
Lertao Ocean Kingdom	乐岛海洋王国	China	Hebei, Qinhuangdao	6
Shijiazhuang Zoo Aquarium	石家庄动物园水族馆	China	Hebei, Shijiazhuang	5
Saintland Sea World	秦皇岛圣蓝海洋公园	China	Hebei, Shijiazhuang	6

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Poseidon Kingdom	哈尔滨波塞冬海洋王国	China	Heilongjiang, Haerbin	4
Kaifeng Dong Jing Polar Aquarium	开封东京极地海洋馆	China	Henan, Kaifeng	4
Zhengzhou Aquarium	郑州海洋馆	China	Henan, Zhengzhou	6
Wuhan Haichang polar Ocean World	武汉海昌极地海洋世界	China	Hubei, Wuhai	4
Changsha Sea World	长沙海底世界	China	Hunan, Changsha	6
Nanjing Underwater World	南京海底世界	China	Jiangsu, Nanjing	2
Dafeng Port Ocean World	大丰港海洋世界	China	Jiangsu, Yancheng	2
Nanchang Wanda Theme Park	南昌万达海洋乐园	China	Jiangxi, Nanchang	10
Nanchang Ocean Park	南昌海洋公园	China	Jiangxi, Nanchang	5
Dalian Sun Asia Ocean World And Polar World	大连圣亚海洋世界	China	Liaoning, Dalian	10
Dalian Laohutan Ocean Park	大连老虎滩海洋公园	China	Liaoning, Dalian	6
Fushun Royal Ocean World	抚顺皇家海洋主题乐园	China	Liaoning, Fushun	26
Xining Ocean Park	新华联国际旅游城嬉水乐园	China	Qinghai, Xining	2
Quancheng Ocean Polar world	泉城海洋极地世界	China	Shandong, Jinan	8
Linyi Ocean Kingdom	临沂极地海洋世界	China	Shandong, Linyi	2
Ocean Aquarium of Penglai	蓬莱海洋水族馆	China	Shandong, Penglai	10
Qingdao Haichang Polar Ocean World	青岛海昌极地海洋世界	China	ShanDong, Qingdao	9
Xixiakou Wildlife Park	西霞口野生动物园	China	Shandong, Weihai	6
Weihai Shenyou Ocean World	威海神游海洋世界	China	Shandong, Weihai	2
Qujiang Ocean World	曲江海洋世界	China	Shannxi, Xian	8

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Chengdu Haichang Polar Ocean Park	成都海昌极地海洋世界	China	Sichuan, Chengdu	17
Tianjin Haichang Polar World	天津海昌极地海洋世界	China	Tianjin	12
Hangzhou Polar Ocean World	杭州极地海洋世界	China	Zhejiang, Hangzhou	17
Ningbo Sea World	宁波海洋世界	China	Zhejiang, Ningbo	2
Suzhou Ocean Aquarium	苏州海洋馆	China	Zhejiang, Suzhou	2
Taizhou Ocean World	台州海洋世界	China	Zhejiang, Taizhou	3
Dalian Beluga coffee	大连鲸咖啡	China	Liaoning, Dalian	4
Ocean Park Hong Kong		China	Hong Kong	8
Nanchang Zoo	南昌动物园	China	Jingxi, Nanchang	2
Acuario Rodadero		Colombia	Santa Marta, Magdalena	5
Oceanario Islas del Rosario		Colombia	Cartagena	6
Acuario de Baconao		Cuba	Santiago de Cuba	2
Acuario Cayo Naranja		Cuba	Holguin	11
Acuario Nacional de Cuba		Cuba	La Habana	6
Delfinario Cayo Guillermo		Cuba	Morón	6
Delfinario Cayo Largo		Cuba	Isla de la juventud	3
Delfinario Cayo Santa Maria		Cuba	Province Villa Clara	21
Delfinario Cienfuegos		Cuba	Cienfuegos	7
Delfinario Varadero		Cuba	Varadero	14
Rancho Cangrejo Dolphinarium		Cuba	Varadero	9
Cayo Blanco Dolphinarium		Cuba	Cayo Blanco	2

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Dolphin Academy Curaçao		Curaçao	Willemstad	22
Curaçao Therapy & Research Center		Curaçao	Willemstad	5
Ocean World Adventure Park, Puerto Plata		Dominican Republic	Punta Cana	3
Dolphin Discovery, Punta Cana		Dominican Republic	Punta Cana	10
Dolphin Explorer		Dominican Republic	Punta Cana	32
Dolphin Island Park		Dominican Republic	Punta Cana	15
Manati Park		Dominican Republic	Punta Cana	3
Dolphin World Egypt		Egypt	Makadi Bay in Hurghada	4
Dolphina Hurghada		Egypt	Hurghada	4
Marineland Antibes		France	Antibes	11
Parc Astérix		France	Plailly	8
Planète Sauvage		France	Port-Saint-Père	8
Moorea		French Polynesia	Tiahura, Moorea	3
Batumi Dolphinarium		Georgia	Batumi	12
Nürnberg Tiergarten		Germany	Nürnberg	7
Zoo Duisburg		Germany	Duisburg	8
Dolphin Cove Grand Cayman		Grand Cayman	West Bay	6
Dolphin Discovery Grand Cayman		Grand Cayman	Grand Cayman	14
Attica Zoological Park		Greece	Spata	7
Roatán Institute for Marine Sciences		Honduras	Roatan (Sandy Bay)	7

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
The Melka Hotel, Lovina		Indonesia	Lovina	5
Dolphin Lodge Bali		Indonesia	Sanur	9
Gelanggang Samudra - Ocean Dream		Indonesia	Jakarta	4
Bidadari Island / Pulau Bidadari		Indonesia	Jakarta	2
Wersut Seguni Indonesia (WSI) - Pantai Cahaya		Indonesia	Sendang Sekucing	8
Millad, Dolphin Park, Tehran		Iran	Tehran	2
Kish Dolphin Park		Iran	Tehran	5
Tabriz Dolphinarium		Iran	Tabriz	4
Dolphin Reef Eilat		Israel	Eilat	8
Acquario di Genova		Italy	Genova	10
Oltremare		Italy	Riccione	10
Zoomarine Italy		Italy	Rome	8
Dolphin Cove Montego Bay		Jamaica	Montengo Bay	4
Dolphin Cove Ochos Rios		Jamaica	Ocho rios	5
Moon Palace Jamaica Grande		Jamaica	Ocho rios	10
Dolphin Discovery - Dolphin Cove Puerto Seco Beach		Jamaica	Saint Ann	4
Adventure World Shirahama		Japan	Nishimuro, Wakayama	35
Amakusa Pearl Center "Sea Donut"		Japan	Amakusa, Kumamoto	5
Aqua World Oarai		Japan	Higashi Ibaraki, Ibaraki (Oarai-cho)	5
Asamushi Aquarium		Japan	Aomori, Aomori	9
Awashima Marine Park		Japan	Numazu, Shizuoka	3
Dolphin Base		Japan	Higashimuro, Wakayama (Taiji-cho)	10

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Dolphin Fantasy Ishigaki		Japan	Ishigaki, Okinawa	5
Dolphin Fantasy Ito		Japan	Ito, Shizuoka	5
Dolphin Farm Awaji Janohire		Japan	Minami Awaji, Hyogo	5
Echizen Matsushima Aquarium		Japan	Sakai, Fukui	6
Shin Enoshima Aquarium		Japan	Fujisawa, Kanagawa	12
Epson Maxell Aqua Park Shinagawa		Japan	Minato-ku, Tokyo	6
Ise (Futami) Sea Paradise		Japan	Ise, Mie	2
Hakkeijima Sea Paradise		Japan	Yokohama, Kanagawa	27
Hotel Dolphin Resort		Japan	Taiji, Wakayama	6
Iruka Park Iki		Japan	Ikishi, Nagasaki	5
Ise-shima Marine Leisure (Dolphin Island)		Japan	Toba and Shima, Mie	3
Izu-Mito Sea Paradise		Japan	Numazu, Shizuoka	9
Japanese Dolphin Center		Japan	Sanuki, Kagawa	5
Joetsu Municipal Aquarium "Umigatari"		Japan	Joetsu, Niigata	4
Io-world Kagoshima City Aquarium		Japan	Kagoshima, Kagoshima	9
Kamogawa Sea World		Japan	Chiba	23
Keikyou Aburatsubo Marine Park		Japan	Miura, Kanagawa	10
Kinosaki Marine World		Japan	Toyooka, Hyogo	19
Kujukushima Aquarium "Umi- Kirara"		Japan	Sasebo, Nagasaki	2
Kyoto Aquarium		Japan	Kyoto, Kyoto	6
Marine World Uminonakamichi		Japan	Fukuoka, Fukuoka	18

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Minamichita Beach Land		Japan	Chita, Aichi	15
Misaki Amusement Park		Japan	Osaka	9
Muroto Dolphin Center		Japan	Muroto, Kouchi	4
New Yashima Aquarium		Japan	Takamatsu, Kagawa	3
Niigata City Aquarium		Japan	Niigata, Niigata	7
Noboribetsu Marine Park Nixe		Japan	Noboribetsu, Hokkaido	8
Notojima Aquarium		Japan	Nanao, Ishikawa	15
Oita Marine Palace "Umitamago"		Japan	Ohita, Ohita	6
Ocean Expo Park "Oki-chan Theater" (and/at Okinawa Churaumi Aquarium)		Japan	Okinawa	18
Okinawa Marine Research Center		Japan	Okinawa	13
Osaka Kaiyukan Aquarium		Japan	Osaka	6
Otaru Aquarium		Japan	Otaru, Hokkaido	5
Port of Nagoya Aquarium		Japan	Nagoya, Aichi	19
Sendai Umino-Mori Aquarium		Japan	Sendai, Miyagi	8
Shibushiwan Daikoku Dolphin Land		Japan	Miyazaki	9
Shimoda Floating Kaichu Aquarium		Japan	Shimoda, Shizuoka	8
Shimonoseki Municipal Aquarium "Kaikyo-kan"		Japan	Shimonoseki, Yamaguchi	7
Shinagawa Aquarium		Japan	Shinagawa, Tokyo	5
Suma Aqualife Park		Japan	Kobe, Hyogo	9
Taiji Whale Museum		Japan	Wakayama	35
TWM, Shimoda Dolphin Beach		Japan	Shimoda, Shizuoka	4

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
TWM, Whale Beach, Kujira-hama Kaisui yokujou		Japan	Wakayama	2
Toba Aquarium		Japan	Toba, Mie	3
Tsukumi Dolphin Island		Japan	Tsukumi, Ohita	8
Dolphin Farm Shimanami		Japan	Ehime Imabari	6
Motobu Genki Mura		Japan	Okinawa	11
Lithuania Sea Museum		Lithuania	Klaipėda	12
Mediterraneo Marine Park		Malta	Naxxar	6
Cabo Dolphins Cabo San Jose		Mexico	San Jose del Cabo	5
Cabo Dolphins Cabo San Lucas		Mexico	Cabo san Lucas	7
Dolphin Discovery Los Cabos		Mexico	San Jose del cabo	4
Delfiniti Splash		Mexico	Guanajuato	4
El Rollo Acapulco (CICI)		Mexico	Guerrero	3
Delfiniti Ixtapa		Mexico	Guerrero	10
Dolphin Discovery Six Flags		Mexico	Mexico city	2
Dolphin Adventures Vallarta		Mexico	Nayarit	7
Delfinario Sonora		Mexico	Sonora	3
Delfiniti Veracruz		Mexico	Veracruz	4
Delphinus Acuario Interactivos		Mexico	Quintana Roo	9
Delphinus Puerto Morelos		Mexico	Quintana Roo	9
Delphinus Punta Cancun		Mexico	Quintana Roo	4
Delphinus Riviera Maya		Mexico	Quintana Roo	21
Delphinus Xcaret		Mexico	Quintana Roo	21
Delphinus Xel-Há		Mexico	Quintana Roo	26

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Dolphin Discovery Costa Maya		Mexico	Quintana Roo	4
Dolphin Discovery Cozumel		Mexico	Quintana Roo	9
Dolphin Discovery Dreams		Mexico	Quintana Roo	5
Dolphin Discovery Riviera Maya		Mexico	Quintana Roo	6
Dolphin Discovery Tulum-Akumal		Mexico	Quintana Roo	4
Dolphin Discovery Playa Del Carmen		Mexico	Quintana Roo	3
Dolphinaris Barcelo		Mexico	Quintana Roo	5
Dolphinaris Cancun		Mexico	Quintana Roo	13
Dolphinaris Cozumel		Mexico	Quintana Roo	9
Dolphinaris Riviera Maya Park		Mexico	Quintana Roo	9
Dolphinaris Tulum		Mexico	Quintana Roo	5
Dolphin Discovery in Cancun- Isla Mujeres		Mexico	Cancun	24
Aquaventuras Park		Mexico	Vallarta	5
Agadir Dolphin World		Morocco	Agadir	5
Dolfinarium Harderwijk		Netherlands	Harderwijk	28
Rungnan Dolphinarium		North Korea	Pyongyang	6
Karachi Dolphin Park ¹		Pakistan	Karachi	2
Lahore Dolphin Show		Pakistan	Lahore	4
Dolphins Pacific		Palau	Ngeruktabel Island	7
Zoológico de Quistococha		Peru	Iquitos	1
Ocean Adventure		Philippines	Subic Bay	12
Jardim Zoológico De Lisboa		Portugal	Lisbon	6
Zoomarine Algarve		Portugal	Albufeira	26
Delfinariu Constanta		Romania	Constanța	2

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Dolphin Discovery Costa Maya		Mexico	Quintana Roo	4
Dolphin Discovery Cozumel		Mexico	Quintana Roo	9
Dolphin Discovery Dreams		Mexico	Quintana Roo	5
Dolphin Discovery Riviera Maya		Mexico	Quintana Roo	6
Dolphin Discovery Tulum-Akumal		Mexico	Quintana Roo	4
Dolphin Discovery Playa Del Carmen		Mexico	Quintana Roo	3
Dolphinaris Barcelo		Mexico	Quintana Roo	5
Dolphinaris Cancun		Mexico	Quintana Roo	13
Dolphinaris Cozumel		Mexico	Quintana Roo	9
Dolphinaris Riviera Maya Park		Mexico	Quintana Roo	9
Dolphinaris Tulum		Mexico	Quintana Roo	5
Dolphin Discovery in Cancun- Isla Mujeres		Mexico	Cancun	24
Aquaventuras Park		Mexico	Vallarta	5
Agadir Dolphin World		Morocco	Agadir	5
Dolfinarium Harderwijk		Netherlands	Harderwijk	28
Rungnan Dolphinarium		North Korea	Pyongyang	6
Karachi Dolphin Park ^{vi}		Pakistan	Karachi	2
Lahore Dolphin Show		Pakistan	Lahore	4
Dolphins Pacific		Palau	Ngeruktabel Island	7
Zoológico de Quistococha		Peru	Iquitos	1
Ocean Adventure		Philippines	Subic Bay	12
Jardim Zoológico De Lisboa		Portugal	Lisbon	6
Zoomarine Algarve		Portugal	Albufeira	26

^{vi} Karachi Dolphin Park has closed down

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Primorsky / Primorye Oceanarium Scientific and Educational Complex	Приморский океанариум Научно-образовательный комплекс	Russia	Vladivostok	6
Dolphinarium Kislovodsk	Дельфин-КМВ	Russia	Kislovodsk	2
Aqua World	Акватория Небугский дельфинарий	Russia	Nebug	3
Yeisk Dolphinarium	Ейский дельфинарий	Russia	Yeisk	2
Rostov Dolphinarium	Ростовский дельфинарий	Russia	Rostov-na-Donu	2
Karadag Dolphinarium	Карадагский дельфинарий	Russia	Feodosia	2
Dolphins country / Sevastopol Dolphinarium Artbuhte	Страна дельфиния, Севастопольский дельфинарий	Russia	Sevastopol	2
Evpatoria Dolphinarium	Евпаторийский дельфинарий	Russia	Evpatoria	4
Dolphinarium Koktebel	Дельфинарий Коктебель	Russia	Koktebel	6
Nemo Alushta		Russia	Alushta	5
Nemo Feodosia		Russia	Feodosia	4
Partenit Dolphinarium	Дельфинарий в Партените	Russia	Alushta	5
Atlantis	Атлантида	Russia	Nizhny Novgorod	5
Novorossiysky Dolphinarium Sea Life	Новороссийский дельфинарий	Russia	Novorossisk	4
Cabardinca Dolphinarium	Дельфинарий в Кабардинке	Russia	Cabardinca	2
Fakieh Aquarium		Saudi Arabia	Jeddah	5
Sentosa Resort - Dolphin Island		Singapore	Singapore	26
uShaka Marine World		South Africa	Durban	10
Geoje Sea World		South Korea	Geoje	10
Hanhwa Aqua Planet Jeju		South Korea	Jeju	4

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Jangsaengpo Whale Eco Experience Centre		South Korea	Jangsaengpo	5
Jeju Marine Park		South Korea	Jeju	4
Jeju Pacific Land		South Korea	Jeju	5
Aqualand Costa Adeje		Spain	Santa Cruz de Tenerife	11
Aquopolis Vilaseca		Spain	Tarragona	9
L'Oceanografic		Spain	Valencia	15
Loro Parque		Spain	Santa Cruz de Tenerife	9
Marineland Cataluna		Spain	Palafolls	8
Marineland Mallorca		Spain	Illes Balears	10
Mundomar Benidorm		Spain	Alacant	11
Palmitos Park		Spain	Las Palmas	6
Rancho Texas Lanzarote Park		Spain	Las Palmas	4
Selwo Marina		Spain	Malaga	9
Zoo Aquarium de Madrid		Spain	Madrid	8
Zoo de Barcelona		Spain	Barcelona	4
Dolphin Discovery St. Kitts		St. Kitts	Basseterre	10
Kolmården Zoo		Sweden	Norrköping	9
Farglory Ocean Park		Taiwan, China	Hualien	7
Yehliu Ocean World		Taiwan, China	Yehliu	7
Dolphin World & Resort		Thailand	Pattaya	4
Oasis Sea World		Thailand	Chanthaburi	5
Safari World		Thailand	Bangkok	3
Dolphin Bay Phuket		Thailand	Phuket	5

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Adaland Dolphin Park		Turkey	Aydin	3
Aqualand Dolphinland		Turkey	Antalya	3
Dolphin Park Bodrum		Turkey	Mugla	2
Istanbul Dolphinarium		Turkey	Istanbul	4
Land of Legends		Turkey	Antalya	6
Sealanya Dolphinpark		Turkey	Antalya	3
Onmega Dolphin Therapy Center		Turkey	Mugla	5
Aksu Dolphinarium		Turkey	Antalya	3
Oscar (Оскар) Kirillovka		Ukraine	Kirillovka	5
Oscar (Оскар) Genichesk		Ukraine	Genichensk	5
Oscar (Оскар) Truskavets		Ukraine	Truskavets	6
Nemo Odessa		Ukraine	Odessa	7
Nemo Kharkov		Ukraine	Kharkov	4
Nemo Berdyansk		Ukraine	Berdyansk	3
Watercolor	Скадовский дельфинарий акварель	Ukraine	Skadovsk	3
Atlantis Dolphin Bay		United Arab Emirates	Dubai	24
Dubai Dolphinarium		United Arab Emirates	Dubai	6
SeaWorld San Diego		USA	San Diego, CA	30
Miami Seaquarium		USA	Miami, FL	30
National Aquarium		USA	Baltimore, MD	7
Shedd Aquarium		USA	Chicago, IL	7
Brookfield Zoo		USA	Brookfield, IL	8
Georgia Aquarium		USA	Atlanta, GA	12
Indianapolis Zoo		USA	Indianapolis, IN	9

Name of Facility	Local name	Country	City	Total dolphins (excl. orcas)
Mirage Dolphin Habitat		USA	Las Vegas, NV	10
Institute for Marine Mammal Studies		USA	Gulfport, MS	6
SeaWorld San Antonio		USA	San Antonio, TX	28
Texas State Aquarium		USA	Corpus Christi, TX	4
Dolphin Quest Hawai'i		USA	Waikoloa, HI	12
Dolphin Quest Oahu		USA	Honolulu, HI	8
Discovery Cove (SeaWorld)		USA	Orlando, FL	45
Sea Life Park		USA	Waimanalo, HI	16
Long Marine Laboratory		USA	Santa Cruz, CA	3
Six Flags Discovery Kingdom		USA	Vallejo, CA	14
Clearwater Marine Aquarium		USA	Clearwater, FL	3
Theater of the Sea		USA	Islamorada, FL	8
Marineland Dolphin Adventure		USA	St. Augustine, FL	16
Island Dolphin Care		USA	Key Largo, FL	8
Gulfarium Marine Adventure		USA	Fort Walton, FL	7
Gulf World Marine Park		USA	Panama City, FL	23
Dolphins Plus Oceanside		USA	Key Largo, FL	8
Dolphins Plus Bayside		USA	Key Largo, FL	11
Dolphin Research Center		USA	Grassy Key, FL	26
Dolphin Connection		USA	Duck Key, FL	5
SeaWorld Orlando		USA	Orlando, FL	36
Waterland Mundo Marino		Venezuela	Isla Margarita	11
Tuan Chau Tourist Area		Vietnam	Quang Ninh	2
Vinpearl Land Nha Trang		Vietnam	Nha Trang	2
Baara Land		Vietnam	Hanoi	4

References

1. IUCN. *Tursiops truncatus*. The IUCN Red List of Threatened Species. IUCN Red List of Threatened Species. <https://www.iucnredlist.org/en>. Accessed June 10, 2019.
2. Rose NA, Parsons ECM. *The Case Against Marine Mammals in Captivity*. Animal Welfare Institute and World Animal Protection; 2019.
3. Hastie GD, Wilson B, Thompson PM. Diving deep in a foraging hotspot: acoustic insights into bottlenose dolphin dive depths and feeding behaviour. *Mar Biol*. 2006;148(5):1181-1188. doi:10.1007/s00227-005-0143-x
4. Klatsky LJ, Wells RS, Sweeney JC. Offshore Bottlenose Dolphins (*Tursiops truncatus*): Movement and Dive Behavior Near the Bermuda Pedestal. *J Mammal*. 2007;88(1):59-66. doi:10.1644/05-MAMM-A-365R1.1
5. Marino L, Butti C, Connor RC, et al. A claim in search of evidence: reply to Manger's thermogenesis hypothesis of cetacean brain structure. *Biol Rev*. 2008;83(4):417-440. doi:10.1111/j.1469-185X.2008.00049.x
6. Gregg J. *Are Dolphins Really Smart? The Mammal Behind the Myth*. 1st ed. Oxford: Oxford University Press; 2013. <https://onlinelibrary.wiley.com/doi/abs/10.1111/mms.12138>. Accessed June 4, 2019.
7. Cosentino M. Book review: Are dolphins really smart? *South Fried Sci*. January 2014. <http://www.southernfriedscience.com/book-review-are-dolphins-really-smart/>. Accessed June 4, 2019.
8. Ridgway SH, Carlin KP, Van Alstyne KR, Hanson AC, Tarpley RJ. Comparison of Dolphins' Body and Brain Measurements with Four Other Groups of Cetaceans Reveals Great Diversity. *Brain Behav Evol*. 2016;88(3-4):235-257. doi:10.1159/000454797
9. Ridgway SH, Hanson AC. Sperm whales and killer whales with the largest brains of all toothed whales show extreme differences in cerebellum. *Brain Behav Evol*. 2014;83(4):266-274. doi:10.1159/000360519
10. Janik VM. Whistle Matching in Wild Bottlenose Dolphins (*Tursiops truncatus*). *Science*. 2000;289(5483):1355-1357. doi:10.1126/science.289.5483.1355
11. McCowan B, Hanser SF, Doyle LR. Quantitative tools for comparing animal communication systems: information theory applied to bottlenose dolphin whistle repertoires. *Anim Behav*. 1999;57(2):409-419. doi:10.1006/anbe.1998.1000
12. Herman LM. Cognition and language competencies of bottlenosed dolphins. In: *Cognition and Language Competencies of Bottlenosed Dolphins*. ; 1986:221-225.
13. Herman LM. Body and self in dolphins. *Conscious Cogn*. 2012;21:526-545.
14. Mercado, DeLong. Dolphin Cognition: Representations and Processes in Memory and Perception. *Int J Comp Psychol*. 2010;(23):344-378.
15. Morrison R, Reiss D. Precocious development of self-awareness in dolphins. *PLOS ONE*. 2018;13(1):e0189813. doi:10.1371/journal.pone.0189813
16. Reiss D, Marino L. Mirror self-recognition in the bottlenose dolphin: A case of cognitive convergence. *Proc Natl Acad Sci*. 2001;98(10):5937-5942. doi:10.1073/pnas.101086398
17. Rako-Gospić N, Radulović M, Vučur T, Pleslić G, Holcer D, Mackelworth P. Factor associated variations in the home range of a resident Adriatic common bottlenose dolphin population. *Mar Pollut Bull*. 2017;124(1):234-244. doi:10.1016/j.marpolbul.2017.07.040
18. Hartman KL, Visser F, Hendriks AJ. Social structure of Risso's dolphins (*Grampus griseus*) at the Azores: a stratified community based on highly associated social units. *Can J Zool*. 2008;86(4):294-306.
19. Hawkins ER, Gartside DF. Social and behavioural characteristics of Indo-Pacific bottlenose dolphins (*Tursiops aduncus*) in northern New South Wales, Australia. *Aust Mammal*. 2008;30(2):71-82.
20. Sanino GP, Waerebeek KV, Bressemer M-FV, Pastene LA. A preliminary note on population structure in eastern South Pacific common bottlenose dolphins, *Tursiops truncatus*. 2005:7.

21. Zappulli V, Mazzariol S, Cavicchioli L, Petterino C, Bargelloni L, Castagnaro M. Fatal Necrotizing Fasciitis and Myositis in a Captive Common Bottlenose Dolphin (*Tursiops Truncatus*) Associated with *Streptococcus Agalactiae*. *J Vet Diagn Invest*. 2005;17(6):617-622. doi:10.1177/104063870501700620
22. Buck JD, Shepard LL, Spotte S. Clostridium perfringens as the Cause of Death of a Captive Atlantic Bottlenosed Dolphin (*Tursiops truncatus*). *J Wildl Dis*. 1987;23(3):488-491. doi:10.7589/0090-3558-23.3.488
23. Hargrove J. Expert report of John Hargrove into the conditions of orca, Lolita at Miami Seaquarium. 2016. <https://www.documentcloud.org/documents/3032111-119-Ex-a-Hargrove-Expert-Report.html>. Accessed June 27, 2019.
24. Johnny Tsunami. *Lolita Killer Whale in Captivity - Miami Seaquarium - Please SHARE to Raise Awareness.*; 2015. https://www.youtube.com/watch?v=kmFB3_MDvCA. Accessed June 27, 2019.
25. Sands C. One Dolphin's Story - Hugo. Dolphin Project. <https://www.dolphinproject.com/blog/one-dolphins-story-hugo/>. Published August 3, 2015. Accessed June 27, 2019.
26. Hill L. The Legacy of Flipper. *New York Magazine*. <http://nymag.com/movies/profiles/57863/>. Published 2009. Accessed July 1, 2019.
27. Riley C. The dolphin who loved me: the Nasa-funded project that went wrong. *The Observer*. <https://www.theguardian.com/environment/2014/jun/08/the-dolphin-who-loved-me>. Published June 8, 2014. Accessed July 1, 2019.
28. Robeck T, Steinman K, Yoshioka M, et al. Estrous cycle characterisation and artificial insemination using frozen-thawed spermatozoa in the bottlenose dolphin (*Tursiops truncatus*). *Reproduction*. 2005;129(5):659-674. doi:10.1530/rep.1.00516
29. Edwards EF. Behavioural Contributions to Separation and Subsequent Mortality of Dolphin Calves Chased by Tuna Purse-Seiners in the Eastern Tropical Pacific Ocean. *July 2002*:34.
30. SeaWorld Parks & Entertainment. All About Bottlenose Dolphins - Birth & Care of Young. <https://seaworld.org/animals/all-about/bottlenose-dolphin/care-of-young/>. Accessed August 15, 2019.
31. Godfrey K. BA stops selling tickets to SeaWorld and "cruel" animal attractions. *The Sun*. <https://www.thesun.co.uk/travel/9704366/british-airways-stops-seaworld-animal-attractions/>. Published August 12, 2019. Accessed August 14, 2019.
32. SeaWorld & Busch Gardens Conservation Fund. About Us. <https://swbg-conservationfund.org/about-us/>. Accessed August 14, 2019.
33. SeaWorld Entertainment. *Corporate Responsibility Report 2016*. SeaWorld Entertainment; 2017. http://s1.q4cdn.com/392447382/files/doc_downloads/corporate_responsibility/2016-SeaWorld-Entertainment%27s-Corp-Responsibility-Report_DISTRIBUTE-06-13-2017.pdf.
34. Statista. SeaWorld: revenue 2010-2018 | Statista. <https://www.statista.com/statistics/427133/revenue-of-seaworld-entertainment/>. Published 2019. Accessed August 14, 2019.
35. SeaWorld Entertainment. Investor News. <https://www.seaworldinvestors.com/news-releases/default.aspx>. Published 2019. Accessed August 23, 2019.
36. Anon. About Us - Dolphinaris. Dolphinaris. <https://www.dolphinaris.com/about-us/>. Accessed August 26, 2019.
37. Renjun L, Gewalt W, Neurohr B, Winkler A. Comparative studies on the behaviour of *Inia geoffrensis* and *Lipotes vexillifer* in artificial environments. *Aquat Mamm*. 1994;20:39-39.
38. Kuczaj SA, Highfill LE, Makecha RN, Byerly HC. Why do dolphins smile? A comparative perspective on dolphin emotions and emotional expressions. In: *Emotions of Animals and Humans*. Springer; 2012:63-85.
39. Wassermann SN, Hind-Ozan EJ, Seaman J. Reassessing public opinion of captive cetacean attractions with a photo elicitation survey. *PeerJ*. 2018;6. doi:10.7717/peerj.5953
40. Miller LJ. The Effects of Dolphin Education Programs on Visitors' Conservation-related Knowledge, Attitude and Behavior. 2009. <https://aquila.usm.edu/dissertations/1038/>.

41. Ong C-E. 'Cuteifying' spaces and staging marine animals for Chinese middle-class consumption. *Tour Geogr.* 2017;19(2):188-207.
42. Van Waerebeek K, Sequeira M, Williamson C, Sanino GP, Gallego P, Carmo P. Live-captures of common bottlenose dolphins *Tursiops truncatus* and unassessed bycatch in Cuban waters: Evidence of sustainability found wanting. *Lat Am J Aquat Mamm.* 2006;5(1):39-48.
43. Van Waerebeek K, Bamy IL, Jiddou AM, et al. Indeterminate status of West African populations of inshore common bottlenose dolphins *Tursiops truncatus* cautions against opportunistic live-capture schemes. *Final Rep Fond Int Banc 'Arguin.* 2008.
44. CITES "Non-detriment findings" - Requirements of the Convention | CITES. https://www.cites.org/eng/prog/ndf/Requirements_Convention. Accessed July 3, 2019.
45. Butterworth A, Brakes P, Vail CS, Reiss D. A Veterinary and Behavioral Analysis of Dolphin Killing Methods Currently Used in the "Drive Hunt" in Taiji, Japan. *J Appl Anim Welf Sci.* 2013;16(2):184-204. doi:10.1080/10888705.2013.768925
46. Wells RS, McHugh KA, Douglas DC, et al. Evaluation of Potential Protective Factors Against Metabolic Syndrome in Bottlenose Dolphins: Feeding and Activity Patterns of Dolphins in Sarasota Bay, Florida. *Front Endocrinol.* 2013;4. doi:10.3389/fendo.2013.00139
47. Stoskopf M. Nutrition and Nutritional Diseases of Marine Mammals - Exotic and Laboratory Animals - Merck Veterinary Manual. Merck Veterinary Manual. <https://www.merckvetmanual.com/exotic-and-laboratory-animals/marine-mammals/nutrition-and-nutritional-diseases-of-marine-mammals>. Accessed June 11, 2019.
48. Haulena M, Schmitt T. Anesthesia. In: *In F.M.D. Gulland et al. (Eds.), CRC Handbook of Marine Mammal Medicine.* 3rd edition. New York: CRC Press; :567-606.
49. Lott R, Williamson C. Cetaceans in captivity. In: *In A. Butterworth (Ed.), Marine Mammal Welfare.* Cham, Switzerland: Springer; 2017:161-181.
50. Cornell L. Seaworld v. Marineland Aff of Lanny Cornell. Scribd. <https://www.scribd.com/doc/215567388/Seaworld-v-Marineland-Aff-of-Lanny-Cornell>. Published 2011. Accessed June 11, 2019.
51. Gulland FMD et al. (eds). *CRC Handbook of Marine Mammal Medicine.* 3rd edition. New York: CRC Press
52. Stoskopf, M. Mycotic Diseases of Marine Mammals - Exotic and Laboratory Animals. Merck Veterinary Manual. <https://www.merckvetmanual.com/exotic-and-laboratory-animals/marine-mammals/mycotic-diseases-of-marine-mammals?query=antibiotic%20resistance%20cetaceans>. Accessed June 11, 2019.
53. Jett J, Visser IN, Ventre J, Waltz J, Loch C. Tooth damage in captive orcas (*Orcinus orca*). *Arch Oral Biol.* 2017;84:151-160. doi:10.1016/j.archoralbio.2017.09.031
54. World Animal Protection. *Wildlife Abusement Parks - Wildlife Entertainment Tourism in Bali, Lombok and Gili Trawangan.*; 2018.
55. Stoskopf M. Bacterial Diseases of Marine Mammals - Exotic and Laboratory Animals. Merck Veterinary Manual. <https://www.merckvetmanual.com/exotic-and-laboratory-animals/marine-mammals/bacterial-diseases-of-marine-mammals?query=cetacean%20pneumonia>. Accessed June 11, 2019.
56. Hargrove J, Chua-Eoan H. *Beneath the Surface: Killer Whales, SeaWorld, and the Truth Beyond Blackfish.* St. Martin's Press; 2015.
57. APHIS, USDA. Animal and Plant Health Inspection Service, USDA § 3.107. <https://www.govinfo.gov/content/pkg/CFR-2013-title9-vol1/pdf/CFR-2013-title9-vol1-sec3-106.pdf>. Published 2001. Accessed July 3, 2019.
58. Rose NA, Hancock Snusz G, Brown DM, Parsons ECM. Improving Captive Marine Mammal Welfare in the United States: Science-Based Recommendations for Improved Regulatory Requirements for Captive Marine Mammal Care. *J Int Wildl Law Policy.* 2017;20(1):38-72. doi:10.1080/13880292.2017.1309858
59. AMMPA. AMMPA Standards and Guidelines. 2017. http://bmasuga.com/pdfs/documents/ammpa_standards_guidelines.pdf. Accessed July 5, 2019.
60. World Health Organization, ed. *Guidelines for Safe Recreational Water Environments.* Geneva: World Health Organization; 2003.

61. Zwiener C, Richardson SD, De Marini DM, Grummt T, Glauner T, Frimmel FH. Drowning in Disinfection Byproducts? Assessing Swimming Pool Water. *Environ Sci Technol*. 2007;41(2):363-372. doi:10.1021/es062367v
62. Venn-Watson SK, Jensen ED, Smith CR, Xitco M, Ridgway SH. 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. *J Am Vet Med Assoc*. 2015;246(8):893-898.
63. Jaakkola K, Willis K. How long do dolphins live? Survival rates and life expectancies for bottlenose dolphins in zoological facilities vs . wild populations. *Mar Mammal Sci*. May 2019:mms.12601. doi:10.1111/mms.12601
64. Venn-Watson SK, Jensen ED, Ridgway SH. Evaluation of population health among bottlenose dolphins (*Tursiops truncatus*) at the United States Navy Marine Mammal Program. *J Am Vet Med Assoc*. 2011;238(3):356-360. doi:10.2460/javma.238.3.356
65. Fair PA, Schaefer AM, Houser DS, et al. The environment as a driver of immune and endocrine responses in dolphins (*Tursiops truncatus*). *PLOS ONE*. 2017;12(5):e0176202. doi:10.1371/journal.pone.0176202
66. Reif JS, Schaefer A, Bossart GD. Atlantic Bottlenose Dolphins (*Tursiops truncatus*) as A Sentinel for Exposure to Mercury in Humans: Closing the Loop. *Vet Sci*. 2015;2:407-422. doi:10.3390/vetsci2040407
67. Mullin KD, McDonald T, Wells RS, et al. Density, abundance, survival, and ranging patterns of common bottlenose dolphins (*Tursiops truncatus*) in Mississippi Sound following the Deepwater Horizon oil spill. *PLOS ONE*. 2017;12(10):e0186265. doi:10.1371/journal.pone.0186265
68. Schaefer AM, Stavros H-CW, Bossart GD, Fair PA, Goldstein JD, Reif JS. Associations Between Mercury and Hepatic, Renal, Endocrine, and Hematological Parameters in Atlantic Bottlenose Dolphins (*Tursiops truncatus*) Along the Eastern Coast of Florida and South Carolina. *Arch Environ Contam Toxicol*. 2011;61(4):688-695. doi:10.1007/s00244-011-9651-5
69. Sergeant DE, Caldwell DK, Caldwell MC. Age, Growth, and Maturity of Bottlenosed Dolphin (*Tursiops truncatus*) from Northeast Florida. *J Fish Res Board Can*. 1973;30(7):1009-1011. doi:10.1139/f73-165
70. Small RJ, Demaster DP. Acclimation to Captivity: A Quantitative Estimate Based on Survival of Bottlenose Dolphins and California Sea Lions. *Mar Mammal Sci*. 1995;11(4):510-519. doi:10.1111/j.1748-7692.1995.tb00674.x
71. Marino L, Lilienfeld SO. Dolphin-Assisted Therapy: Flawed Data, Flawed Conclusions. *Anthrozoös*. 1998;11(4):194-200. doi:10.2752/089279398787000517
72. Humphries TL. Effectiveness of Dolphin-Assisted Therapy as a Behavioral Intervention for Young Children with Disabilities. *Bridg Res Train Cent Early Child Dev*. 2003;1(1).
73. Marino L, Lilienfeld SO. Dolphin-Assisted Therapy: More Flawed Data and More Flawed Conclusions. *Anthrozoös*. 2007;20(3):239-249. doi:10.2752/089279307X224782
74. Nathanson DE. Reinforcement Effectiveness of Animatronic and Real Dolphins. *Anthrozoös*. 2007;20(2):181-194. doi:10.2752/175303707X207963
75. Hunt T, Ziccardi M, Gulland F, et al. Health risks for marine mammal workers. *Dis Aquat Organ*. 2008;81:81-92. doi:10.3354/dao01942
76. Buck JD, Wells RS, Rhinehart HL, Hansen LJ. Aerobic Microorganism Associated with Free-Ranging Bottlnose Dolphins in Coastal Gulf of Mexico and Atlantic Ocean Waters. *J Wildl Dis*. 2006;42(3):536-544. doi:10.7589/0090-3558-42.3.536
77. Waltzek TB, Cortés-Hinojosa G, Jr JFXW, Gray GC. Marine Mammal Zoonoses: A Review of Disease Manifestations. *Zoonoses Public Health*. 2012;59(8):521-535. doi:10.1111/j.1863-2378.2012.01492.x
78. ABC News. *Dolphin Bites Child: Orlando Seaworld Dolphin Caught on Tape | Good Morning America | ABC News*. https://www.youtube.com/watch?v=Gd_1Oyz_MPs. Accessed June 10, 2019.
79. Rivera-Lyles J. SeaWorld dolphin bites 7-year-old's hand. *OrlandoSentinel.com*. <https://www.orlandosentinel.com/news/os-xpm-2006-08-21-dolphin21-story.html>. Accessed June 10, 2019.
80. Sea World of Florida LLC. Discovery Cove. Discovery Cove Interaction Release (For Families). 2017. https://discoverycove.com/orlando/-/media/discovery-cove-orlando/files/pdf/waivers/interaction-release_en-minors.ashx. Accessed June 6, 2019.

81. Jones C. The decline of the dolphinarium. *BBC News*. <https://www.bbc.com/news/uk-england-35832175>. Published March 19, 2016. Accessed June 27, 2019.
82. Carbery S. The last dolphin. *N Z Geogr*. 2008;(Nov-Dec). <https://www.nzgeo.com/stories/the-last-dolphin/>. Accessed June 28, 2019.
83. Attica Park. Attica Park Opening Hours / Schedule. Attica Park. <https://www.atticapark.com/en/visitus/opening-hours-activities.297.html>. Accessed June 28, 2019.
84. Marinitsi A. Will Recent Fines Finally Close Illicit Greek Dolphinarium? *Animal People Forum*. <https://animalpeopleforum.org/2019/01/26/will-recent-fines-finally-close-illicit-greek-dolphinarium/>. Published January 26, 2019. Accessed June 28, 2019.
85. Indian Ministry of Environment and Forests. Circular regarding policy on establishment of dolphinarium. May 2013.
86. France 24. Canada bans capture and breeding of dolphins, whales. <https://www.france24.com/en/20190611-canada-bans-capture-breeding-dolphins-whales>. Published June 11, 2019. Accessed June 27, 2019.
87. Kirby D. Here's All the Places Around the World That Ban Orca Captivity. *TakePart*. <http://www.takepart.com/article/2014/04/10/all-states-countries-and-cities-ban-orcas-captivity>. Published October 4, 2014. Accessed July 2, 2019.
88. China Cetacean Alliance. *Ocean Theme Parks: A Look Inside China's Growing Captive Cetacean Industry - 2nd Edition*. Hong Kong: China Cetacean Alliance; 2019. <http://chinacetaceanalliance.org/wp-content/uploads/2019/06/19-CCA-Report-English-FINAL.pdf>.
89. China Cetacean Alliance. CCA Cetacean numbers. *China Cetacean Alliance*. 2019. <https://chinacetaceanalliance.org/en/china-cetacean-alliance/data/>.
90. Couquiaud L. A survey of the environments of cetaceans in human care. *Aquat Mamm*. 2005;38(3):283-385.
91. Neumann DR. Activity budget of free-ranging common dolphins (*Delphinus delphis*) in the northwestern Bay of Plenty, New Zealand. *Aquat Mamm*. 2001;27(2):121 - 136.
92. Peters KJ, Parra GJ, Skuza PP, Möller LM. First insights into the effects of swim-with-dolphin tourism on the behavior, response, and group structure of southern Australian bottlenose dolphins. *Mar Mammal Sci*. 2013;29(4):E484 - E497.
93. Anon. Dolphin dies after collision during Sea World trick - CNN.com. <http://edition.cnn.com/2008/US/04/28/dolphin.death/index.html>. Published April 28, 2008. Accessed July 1, 2019.
94. Sieczkowski C. SeaWorld Under Fire For Disturbing Response To Distressed Animal. *HuffPost*. https://www.huffpost.com/entry/seaworld-pilot-whale-video_n_3670634. Published July 29, 2013. Accessed July 1, 2019.
95. Sieczkowski C. SeaWorld Criticized After Video Release Shows Dolphin Hurt, Bleeding At Park. *HuffPost*. https://www.huffpost.com/entry/seaworld-dolphin-hurt_n_3689746. Published January 8, 2013. Accessed July 1, 2019.
96. National Center for Environmental Health. What noises cause hearing loss? June 2019. https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html.
97. Curtin S, Wilkes K. Swimming with captive dolphins: current debates and post-experience dissonance. *Int J Tour Res*. 2007;9(2):131 - 146.
98. Dorschner J, Christensen D. Amusement-parks giant in talks to buy Miami Seaquarium. *MiamiHerald*. <https://www.miamiherald.com/news/local/community/miami-dade/article1958210.html>. Published April 12, 2013. Accessed August 27, 2019.
99. Dinkova L. Seaquarium deal flows swimmingly. *Miami Today*. May 2014. <https://www.miamitodaynews.com/2014/05/07/seaquarium-deal-flows-swimmingly/>. Accessed August 27, 2019.
100. Miami Seaquarium. About Us: History. <https://web.archive.org/web/20130306123822/http://miamiseaquarium.com/AboutUs/History>. Published March 6, 2013. Accessed August 27, 2019.

101. Sea Life Park Hawaii. Family Oahu Aquarium - Swim with Dolphins in Oahu. <https://www.sealifeparkhawaii.com/>. Published 2019. Accessed August 27, 2019.
102. Ryan C. Miami Seaquarium Giving Would-Be Trainers a Head Start. NBC 6 South Florida. <http://www.nbcmiami.com/news/local/Miami-Seaquariums-Trainer-for-a-Day-97304744.html>. Published June 28, 2010. Accessed August 27, 2019.
103. Palace Entertainment. Palace Entertainment: About | LinkedIn. <https://www.linkedin.com/company/palace-entertainment/about/>. Published 2019. Accessed August 27, 2019.
104. Sampson H. California theme park company to buy Miami Seaquarium | Miami Herald. <https://www.miamiherald.com/news/business/article2087768.html>. Published March 28, 2014. Accessed August 27, 2019.
105. Candover Investments. Overview details - Candover. <http://www.candoverinvestments.com/overview-details/>. Accessed August 27, 2019.
106. Reuters. Owner of Spain's Parques Reunidos considers flotation - sources. Reuters. <https://www.reuters.com/article/parquesreunidos-ipo-idUSL8N14Y37H20160114>. Published January 14, 2016. Accessed August 27, 2019.
107. Anon. Candover and out - Private equity. <https://www.economist.com/finance-and-economics/2010/09/02/candover-and-out>. Published February 9, 2010. Accessed August 27, 2019.
108. Palace Entertainment. Palace Corporate - News & Press. Palace Corporate. <https://www.palaceentertainment.com/news-and-press>. Accessed August 27, 2019.
109. Parques Reunidos. Mission, Values, and Objectives. Grupo Parques Reunidos. <https://www.parquesreunidos.com/en/the-group/mission-values-and-aims/>. Accessed August 27, 2019.
110. Bloomberg. Stock Quote - Parques Reunidos Servicios Centrales SAU - Bloomberg Markets. <https://www.bloomberg.com/quote/PQR:SM>. Accessed August 27, 2019.
111. Dodds M. Parques Reunidos fined for keeping dolphins in unsuitable conditions. *Mar Connect*. April 2019. <https://marineconnection.org/parques-reunidos-fined-for-keeping-dolphins-in-unsuitable-conditions/>. Accessed August 27, 2019.
112. Attraction Tickets Direct | ATD Travel Services. <https://www.atdtravelservices.co.uk/our-brands/attraction-tickets-direct>. Accessed August 14, 2019.
113. World Animal Protection. The show can't go on: End the suffering of wild animals at cruel visitor attractions in zoos and aquariums. https://d31j74p4pxrpf.cloudfront.net/sites/default/files/int_files/15072019_waza_report-final.pdf. Published July 2019. Accessed August 26, 2019.
114. Kantar TNS. *Global Survey and Report - Wild Animals in Entertainment*; 2019.
115. Anon. Quick Facts - Carnival Corporation. <http://phx.corporate-ir.net/phoenix.zhtml?c=200767&p=irol-funfacts>. Accessed August 26, 2019.
116. Anon. Power List 2019 - Expedia Group. Travel Weekly - The Travel Industry's Trusted Voice. <https://www.travelweekly.com/Power-List-2019/Expedia-Group>. Published 2019. Accessed September 9, 2019.
117. Ric O'Barry's Dolphin Project. Dolphin Readaptation Center. *Ric O'Barry's Dolphin Proj*. 2011. <https://www.dolphinproject.com/campaigns/indonesia-campaign/dolphin-readaption-center/>.
118. Ric O'Barry's Dolphin Project. Release Case: South Korea. *Ric O'Barry's Dolphin Proj*. 2018. <https://www.dolphinproject.com/resources/about-dolphins/releasing-captive-dolphins/readaption-vs-release/release-case-south-korea/>.
119. Kim HJ, Jin SJ, Yoo SH. Public assessment of releasing a captive indo-pacific bottlenose dolphin into the wild in South Korea. *Sustainability*. 2018;10(9):3199.
120. Little S. Vancouver Aquarium drops cetacean ban lawsuit against Park Board, signs new 35-year deal | Globalnews.ca. <https://globalnews.ca/news/5429854/vancouver-aquarium-drops-lawsuit/>. Published 2019. Accessed July 3, 2019.

121. Actman J. For Dolphins, a Bold Decision by the National Aquarium. National Geographic News. <https://news.nationalgeographic.com/2016/06/national-aquarium-captive-dolphins-retire-ocean-sanctuary/>. Published June 15, 2016. Accessed July 3, 2019.
122. Reed L. National Aquarium's plan to relocate dolphins from Baltimore by 2020 is delayed by climate change, pollution. baltimoresun.com. <https://www.baltimoresun.com/maryland/baltimore-city/bs-md-ci-aquarium-dolphins-20190418-story.html>. Published 2019. Accessed July 3, 2019.
123. Anon. SeaWorld Entertainment Inc. testing new Orca Encounter in San Diego before ending San Antonio killer whale shows. San Antonio Business Journal. <https://www.bizjournals.com/sanantonio/news/2017/01/05/seaworld-ready-to-lower-the-curtain-on-shamu-shows.html>. Published 2017. Accessed July 3, 2019.
124. Kiryuu238. Orca Encounter - Seaworld San Diego - Feb 20, 2019.; 2019. <https://www.youtube.com/watch?v=otPJSfKqXqE>. Accessed July 3, 2019.
125. SeaWorld. Ocean Discovery: Dolphin & Beluga Whale Show | SeaWorld San Antonio. <https://seaworld.com/san-antonio/shows/ocean-discovery/>. Published 2019. Accessed July 3, 2019.
126. EchoBeluga. A Beluga Christmas (Full Show) at SeaWorld San Antonio on 11-16-18.; 2018. <https://www.youtube.com/watch?v=MFgdB8KCYQM>. Accessed July 3, 2019.
127. Martin M, Rubbo L. Tourist marine park announces end to captive dolphin breeding. ABC News. <https://www.abc.net.au/news/2019-03-15/dolphins-no-longer-bred-in-captivity-at-marine-park/10900832>. Published March 15, 2019. Accessed July 3, 2019.
128. Merlin Entertainments. World's First Beluga Whale Sanctuary | Merlin Backstage. <https://backstage.merlinentertainments.biz/beluga-whale-sanctuary/>. Published 2018. Accessed July 3, 2019.
129. Sea Life Trust. The Sanctuary. Beluga Whale Sanctuary. <https://belugasanctuary.sealifetrust.org/en/about-the-sanctuary/the-sanctuary/>. Published 2019. Accessed July 3, 2019.
130. CHCH. Marineland unveils its new \$6,000,000 splash pad. CHCH. www.chch.com/marineland-unveils-its-new-6000000-splash-pad/. Published 2019. Accessed July 3, 2019.
131. Sablich J. TripAdvisor to Stop Selling Tickets to Many Animal Attractions. *The New York Times*. <https://www.nytimes.com/2016/10/11/travel/tripadvisor-to-stop-selling-tickets-to-many-animal-attractions.html>. Published October 11, 2016. Accessed September 2, 2019.
132. TripAdvisor. Safari World (Bangkok) - 2019 Book in Destination - All You Need to Know BEFORE You Go (with Photos). TripAdvisor. http://www.tripadvisor.com/Attraction_Review-g293916-d455818-Reviews-Safari_World-Bangkok.html. Accessed August 15, 2019.
133. TripAdvisor. Namuang Safari Park (Ko Samui) - 2019 All You Need to Know BEFORE You Go (with Photos). TripAdvisor. http://www.tripadvisor.com/Attraction_Review-g293918-d1587700-Reviews-Namuang_Safari_Park-Ko_Samui_Surat_Thani_Province.html. Published 2019. Accessed August 15, 2019.
134. TripAdvisor. Zoo d'Amneville - 2019 Book in Destination - All You Need to Know BEFORE You Go (with Photos). TripAdvisor. http://www.tripadvisor.com/Attraction_Review-g1136778-d1819364-Reviews-Zoo_d_Amneville-Amneville_Moselle_Grand_Est.html. Published 2019. Accessed August 15, 2019.
135. Google. TripAdvisor won't sell tickets to cruel wildlife attractions - Google Search. https://www.google.com/search?biw=1280&bih=578&ei=UxRVXaGZBceBvgSHs7jQAQ&q=tripadvisor+won%27t+sell+tickets+to+cruel+wildlife+attractions&oq=tripadvisor+won%27t+sell+tickets+to+cruel+wildlife+attractions&gs_l=psy-ab.3...15487.20550..20965...1.0..0.139.2459.0j22.....0....1..gws-wiz.....35i39.zrAllCDhd6E&ved=0ahUKewjhjoOrr4TkAhXHgl8KHYcZDhoQ4dUDCAo&uact=5. Published 2019. Accessed August 15, 2019.
136. World Cetacean Alliance. WCA and Virgin Holidays. *World Cetacean Alliance*. June 2019. https://worldcetaceanalliance.org/our_projects/wca-and-virgin-holidays/. Accessed August 15, 2019.

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