



SPECIFIC GUIDANCE MANUAL

Dolphins in Captive Environments

Welcome to the online version of this Best Practice Handbook. Use the interactive navigation to guide your way through the manual.

Introduction

Animal attractions and experiences are now a common part of holiday destinations and are generally very popular with holiday makers. Customer surveys have shown many of the travelling public aspire to see or interact with animals. Yet research and experience also demonstrate that customers want to be assured of good animal welfare standards (YouGov 2012).

This guidance manual outlines the minimum requirements that travel providers working with these manuals expect to see in place from captive dolphin attractions. Additionally, it provides best practice recommendations that captive dolphin attractions should strive to achieve.

As the number of enterprises has grown, so too has our understanding of the animals featured and the potential impacts of human/animal interaction. Strong relationships exist between travel providers and suppliers; it is important that all stakeholders work collectively to enable enterprises to offer meaningful, rewarding experiences to customers whilst at the same time, safeguarding the welfare of the animals and public health and safety. This approach could achieve longer-term business success, raise welfare standards across the industry and strengthen the partnerships that exist between travel providers and animal related attractions.

This document is one of a series and should be read in conjunction with the *Global Welfare Guidance for Animals in Tourism*.

Authorship

This manual and the supporting six guidance manuals have been developed by ABTA working in partnership with our consultative partner, the Born Free Foundation and have been further developed through a multi-stakeholder consultation process involving industry experts, scientists, zoologist organisations, associations and non-governmental organisations (NGOs) from around the world. A list of stakeholders is included in Appendix 2. It is important to point out that the content of these manuals does not necessarily reflect the exact views of the listed individuals or organisations. All stakeholders have, however, seen merit in these guidance manuals and provided invaluable input during the consultation. ABTA extends its appreciation to all the stakeholders for their contributions.

Licensing and certification

Animal attractions should be operating legally and in accordance with their country's own legal requirements. If appropriate to the country of operation, the animal attraction should have a valid operating licence issued by a recognised certification agency or relevant local authority.

Intended use of this guidance

This guidance manual is one of a series of seven manuals intended to be a practical guide for the suppliers of animal experiences and attractions offered within the tourism industry. All seven guidance manuals aim to encourage good practice in animal protection and welfare by providing businesses with knowledge and guidance.

The manuals include a benchmark for best practice in animal welfare for the tourism and animal attractions industries globally. They consolidate an abundance of existing guidance and they establish minimum requirements that are supported by travel providers. As such, they are intended for travel providers to issue to their suppliers, for tourist boards in destinations, for destination governments and ultimately and most importantly, for animal attraction and experience suppliers.

All seven manuals are by no means intended to be the definitive source of information about managing animal welfare considerations in animal attractions. We recognise there is a great deal of variation in available standards around the world and that for many businesses the manuals will contain commonly known information, but for others they will likely serve as a useful reference regarding best practice in animal welfare. In all instances of uncertainty, we encourage suppliers to seek further advice from a suitably qualified individual or organisation.

Guidance manual overview

There are seven manuals within the series:

Global Welfare Guidance for Animals in Tourism

The *Global Welfare Guidance for Animals in Tourism* provides an introduction to animal welfare and an overview of best practice that is applicable to all businesses and attractions within the tourism industry involving animals. It covers:

- An insight into the different ways in which animals and tourism are linked
- Minimum welfare requirements for animal attractions
- Reference to specific welfare needs of commonly managed species.

It sets out guidance around animal husbandry and care designed to improve animal welfare and to phase out inappropriate practices known to have negative impacts on animals.

Specific guidance manuals

In addition, five specific guidance manuals cover a variety of activities commonly encountered through tourism. These manuals are intended to guide suppliers to achieve the minimum requirements for each of the specific activity types, besides encouraging progress towards the best practice outlined.

Specific guidance is available for:

- *Animals in Captive Environments*
- *Dolphins in Captive Environments*
- *Elephants in Captive Environments*
- *Wildlife Viewing*
- *Working Animals*.

This specific guide is for *Dolphins in Captive Environments* and covers minimum requirements expected by travel providers working with this manual. It also provides best practice guidance that suppliers of captive dolphin attractions are encouraged to achieve.

Unacceptable and Discouraged Practices

The final manual in the series relates to practices involving animals which have been classified as either unacceptable or discouraged by the travel providers working with these guidance manuals.

Unacceptable practices

Certain activities are widely recognised as having a detrimental impact on animal welfare, and in some cases, may present a high risk to visitor and staff safety. These activities have therefore been classified as 'unacceptable'. Travel providers working with these guidance manuals have agreed that these activities should not be offered for sale to customers.

Discouraged practices

Some activities involving animals and people may pose health and safety risks. Suppliers of activities involving animals and people should consider and effectively manage both the welfare of the animals and the health & safety of visitors and staff. Travel providers working with these guidance manuals will only consider promoting animal based activities which are classified as discouraged practices where they are satisfied that the risks to animal welfare and the health and safety of customers are managed appropriately.

Certain activities involving animals and customers have been publicly criticised as detrimental to animal welfare. Though there is currently a lack of conclusive evidence, there is a risk that such activities are detrimental to welfare. We have therefore classified these activities as 'discouraged'.

All discouraged practices are explained fully in the specific manual, *Unacceptable and Discouraged Practices*.

Minimum requirements and best practice guidelines

This and the other six guidance manuals contain a set of minimum requirements intended to be the benchmark for the minimum acceptable level of animal welfare in tourism activities. As a supplier reading these manuals, you are strongly advised to ensure that you can easily demonstrate that your business complies with the minimum requirements. Travel providers working with these manuals have committed to these minimum requirements and will be developing procedures to check that suppliers comply and are continually striving for performance improvements. These manuals contain examples of realistic and achievable best practice guidelines for animal welfare in tourism-related attractions and activities.

KEY POINTS

- **Unacceptable practices are known to have a detrimental effect on animal welfare.**
- **Discouraged practices may pose a risk to tourist health and safety and/or a possible risk to animal welfare.**
- **Animal attractions should comply with the minimum requirements for animal welfare.**
- **We encourage animal attractions to aim for best practice in animal welfare.**
- **All seven manuals are compatible with audited industry standards.**

Audits and inspections

We recognise that many animal attraction suppliers are members of trade bodies and associations that already have membership requirements relating to animal welfare best practice and that many inspect their members. The *Global Welfare Guidance for Animals in Tourism* upholds internationally-accepted standards in animal welfare and legislation and is therefore compatible with existing industry standards. Audited suppliers should be able to demonstrate compliance with these minimum requirements.



Use the interactive coloured tabs on the this page to navigate the manual.

SECTION ONE: What is animal welfare?

SECTION TWO: Tourism and captive cetaceans

SECTION THREE: Wild capture of cetaceans for captivity and the potential impacts

SECTION FOUR: Minimum requirements

SECTION FIVE: Captive environments – managing the potential impacts

SECTION SIX: Supporting information

SECTION SEVEN: Examples of best management practices – quick reference table

APPENDICES

SECTION 1

2 What is animal welfare?

Animal welfare refers to the state of an animal. An animal is in a reasonable state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behaviour and if it is not suffering from unpleasant states such as pain, fear and distress. Other terms such as animal care, husbandry or humane treatment refer to how an animal is looked after. Reasonable animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/euthanasia. Animals in a captive environment rely on the care and ability of humans to provide them with what they need to maintain their welfare.

Appropriate animal care

In order to encourage best practice in animal welfare in the tourism supply chain, the *Global Welfare Guidance for Animals in Tourism* and the six supporting guidance manuals build upon the principles of the Five Freedoms (developed by the Farm Animal Welfare Council (FAWC 1979)) and the Welfare Quality® criteria. See Appendix 1: sources of further information.

The Welfare Quality® criteria were originally developed for farmed domestic animals. An additional three criteria have been included to address animals in tourism. These additional criteria appear in bold in Table 1.

KEY POINTS

- You are responsible for an animal if you supply, own or are in charge of it.
- Five Freedoms form the basis of good animal welfare.
- Welfare Quality® criteria define the details of good animal welfare.

Table 1: The Five Freedoms and how they relate to the Welfare Quality® criteria (including the additional criteria)

Five Freedoms	Welfare quality® criteria
Good feeding	1. Absence of prolonged hunger. 2. Absence of prolonged thirst.
Good housing	3. Comfort while resting. 4. Thermal comfort. 5. Ease of movement.
Good health	6. Absence of injuries. 7. Absence of disease. 8. Absence of pain induced by inappropriate management procedures.
Appropriate behaviour	9. Expression of social behaviours. 10. Expression of natural behaviours. 11. Good human-animal relationship. 12. Positive emotional state.
Protection from fear and distress	13. Absence of general fear/distress/apathy. 14. Ability to seek privacy/refuge. 15. Absence of surgical or physical modification of the skin, tissues, teeth or bone structure other than for the purposes of genuine medical treatment/manipulation/sedation.

Suppliers, animal owners and keepers have a responsibility to the animals for which they are responsible on a permanent or temporary basis. This includes the provision of their health and welfare needs (described in Table 1). A person could, therefore, be responsible for an animal if they supply, own, or are in charge of it.

Application of and adherence to the Welfare Quality® criteria will go some way to safeguarding the welfare of the animal and to providing a state of wellbeing and dignity. Application of the *Global Welfare Guidance for Animals in Tourism* and the six supporting manuals will seek to uphold these criteria, protect animals in tourism attractions or affected by tourism experiences, and help to prevent animal suffering.

SECTION 2

Tourism and captive cetaceans

4

Dolphins, whales and porpoises are mammals and collectively known as and referred to as cetaceans in this manual. In captivity, cetaceans require a carefully managed approach in order to safeguard their welfare.

Information on cetacean species commonly found in captive animal facilities

Bottlenose dolphin (*Tursiops truncatus*)

- In the wild, the average lifespan is approximately 20 years.
- Classified as Least Concern by the IUCN (International Union for Conservation of Nature) Red List of Threatened Species.
- Listed on Appendix II under CITES but awarded the highest protection in the EU.



Bottlenose dolphins.



Orcas in the wild.

Orca (killer whale) (*Orcinus orca*)

- In the wild, the average lifespan is approximately 30 years for males and 46 years for females.
- Classified as Data Deficient by the IUCN Red List.
- Listed under Appendix II under CITES, but awarded the highest protection in the EU.

Beluga (*Delphinapterus leucas*)

- In the wild, the average lifespan is approximately 20 years.
- Classified as Near Threatened by the IUCN Red List.
- Listed as Appendix II under CITES, but awarded the highest protection in the EU.



Beluga whale.



A dolphin show where the dolphin displays its jumping ability.

The range of captive activities involving cetaceans

Performances

Performances by one or more cetaceans (choreographed by and sometimes involving trainers) where they undertake various stunts, often including but not limited to breaching, beaching on the poolside, dorsal pulls, pushing and holding toys (or other items) with their rostrum, interactions in the water with their trainers, diving through hoops, somersaults and lobtailing, in which the cetacean lies on its back at the surface, slapping its tail on the water. Performances may be accompanied by educational commentary, and are often choreographed to music.

Photographic opportunities

Photo opportunities with cetaceans can take place either in the water or outside of the water. Photographic opportunities with cetaceans outside the water involve the animal removing itself from the pool on command to enable a photograph to be taken, sometimes with a customer crouching near to the animal when it is out of the water.

Swim-with interaction

Usually limited to dolphins and/or beluga whales. Customers are permitted to swim with the animals under supervision and the animal performs various pre-trained activities including but not limited to dorsal pulls, foot pushes and touching/kissing the dolphin.



Swim-with interaction is very popular with tourists.

Feeding

Usually limited to dolphins, beluga and porpoises, members of the public are allowed to feed them thawed fish.

Dolphin assisted therapy (DAT)

Usually limited to dolphins and/or beluga whales. As per swim-with interaction but often advertised and priced as a therapy for autistic and other disabled people. There is a long-standing discussion over whether DAT is a valid form of treatment. Supporters suggest that it offers a valid form of treatment whilst critics suggest that direct interaction with dolphins is no more beneficial than contact with any other animal.

Critics also point out that dolphins are much less accessible than many other animals employed in these types of therapies, and believe it negatively impacts on the dolphin. It is clear from the debate that further robust research is required to allow a conclusive position to be reached regarding the potential benefits of DAT.

Animal welfare considerations

As sociable, intelligent and far-ranging marine mammals, keeping cetaceans in captivity creates specific challenges. Within captive environments, cetaceans are largely reliant on keepers/suppliers to provide conditions that attempt to meet their basic species-specific needs.

Animal welfare and health are intrinsically linked (World Organisation for Animal Health (OIE)). Keeping animals for prolonged periods in inappropriate conditions can compromise both their physical and mental health, which may contribute to the development of abnormal behaviour, disease and early mortality. Every effort should be made to provide all animals with a suitable environment that provides the opportunity for and encourages natural behaviour. Natural behaviour can range considerably between ages, individuals, group composition, weather conditions, populations, culture and even species. However, it is important that dolphinaria staff and enclosures provide for inhabitants to express behaviours that they would in the wild.

Visitor safety

Many countries have categorised commonly kept animal species by their ability to cause harm; and then based on this categorisation they restrict, control or prohibit human/animal contact. For example, in the UK the Department for Environment, Food and Rural Affairs (Defra), has produced a species list based on three risk categories.

For animal specific categorisation based on the Defra species list, please refer to Appendix 1: animal husbandry information tables in section thirteen of the *Global Welfare Guidance for Animals in Tourism*.

Dolphins and Porpoises are categorised as a Category 3 whilst orca are classified as a Category 1 – Greatest Risk and therefore direct contact should be subject to a risk assessment.

Cetaceans are also known to harbour bacterial and fungal diseases such as streptococci, staphylococci, pseudomonas, mycobacteria and lacciosis (in free-ranging dolphins) that may be transferable to humans, there is also a possibility of disease transmission from human to cetacean.

Direct contact or entering pools with infected animals may therefore pose a risk to public and dolphin health. Whilst documented cases of acquired illness in humans are low in numbers, it is nevertheless a risk that should be considered and managed appropriately. For further information, see Appendix 1: sources of further information.



Attractions offering public interaction with dolphins need to protect both animal welfare and public health and safety.

Suppliers of activities involving public interaction and swim-with contact between mammals and people should take all reasonable steps to safeguard the health and safety of visitors and staff, as well as the mammals themselves. Travel providers working with these guidance manuals will only consider offering such activities where they are satisfied that the risks to animal welfare and the health and safety of customers are managed appropriately. Furthermore all contact situations should be supervised by an appropriately qualified member of staff.

Customers should be informed of the potential risks and the rules of engagement. For example, their expected behaviour, measures taken to minimise potential harm or stress to the animals; and washing their hands before and after permitted animal contact to prevent disease transmission.

KEY POINTS

- Bottlenose dolphins, orca and beluga are cetaceans commonly found in captive animal facilities.
- Common tourism related activities with captive dolphins include performances, photos, swim-with and feeding.
- A suitable captive environment should provide opportunities for and encourage natural behaviour.
- Suppliers of activities involving public interaction and swim-with contact between mammals and people should take all reasonable steps to safeguard the health and safety of visitors and staff, as well as the mammals themselves.

SECTION 3

Wild capture of cetaceans for captivity and the potential impacts

The capture of cetaceans from the wild can have a damaging impact upon both the individual animals and the wild cetacean population. Unmonitored wild captures potentially threaten the viability of local and global populations of cetaceans.

In the UK, travel provider members of ABTA's Animal Welfare Working Group require all suppliers to be able to demonstrate that any wild-caught marine mammal imports have not compromised the sustainability of the wild population from which the animals were taken. Such an approach has been adopted in line with CITES (Convention on International Trade in Endangered Species). This states that acquisitions from the wild should only be made under the authority of the appropriate governmental regulatory agency, which authorises the trade and ensures the capture does not threaten the wild population. This is known as a Non-Detriment Finding (NDF) report, which is issued to authorise the capture. Any lawfully acquired wild-caught CITES-listed animal should therefore have the correct paperwork: a CITES permit and NDF report.



Dolphins are captured from the wild to stock the world's captive dolphin industry.

KEY POINTS

- The capture of cetaceans from the wild should not threaten the viability of local and global cetacean populations.
- Trade in cetaceans is regulated by CITES.
- CITES requires appropriate governmental regulatory agencies to authorise trade in the species contained within the CITES annexes.
- Regulatory agencies are required to issue a Non-Detriment Finding (NDF) before wild-capture of CITES protected species.

SECTION 4

Minimum requirements

12

It is expected that all tourism businesses that keep, own or manage animals, or provide experiences involving animals (including visiting animal attractions such as hotel entertainment programmes), ensure that they meet the minimum requirements in the husbandry and care of animals. Travel providers working with these guidelines will be developing processes to assess suppliers against the minimum requirements listed below.

The minimum requirements are subdivided into three sets, the following two of which are applicable to attractions housing captive whales and dolphins:

- A. For situations where animals are managed by and/or are dependent on human beings.
- B. Specifically for businesses with cetaceans.

A. Minimum requirements for animals managed and/or dependent upon human beings

1. All animals have regular, daily access to adequate and clean drinking water in line with their species specific needs.
2. All animals are fed appropriate food (which includes necessary supplements for animals in captivity), via an appropriate feeding routine, which mentally stimulates the animal(s) and encourages natural behaviour (e.g. foraging, browsing, grazing etc.).

3. In captivity, enclosures (including pools) or methods used to contain the animals for temporary periods allow all the animals to move and exercise freely, and to maintain sufficient distance from other animals in case of conflict.
4. In captivity, enclosures are environmentally complex, including natural substrate, furniture, shelter and environmental enrichment, in order to encourage normal/natural behaviour. All animals should be able to seek shelter from extreme weather conditions and privacy from view.
5. In captivity, enclosures are clean, hygienic and well maintained, (e.g. devoid of excessive faeces, urine or rotting food, potentially harmful litter, not waterlogged, not infested with vermin etc.).
6. The facility employs a vet who is knowledgeable and experienced in the health and welfare of the relevant animals (either employed on site or externally contracted).

7. There is a policy not to surgically modify the skin, tissues, teeth or bone structure of animals, and not to sedate animals to make them safe to handle, unless it is for the purpose of genuine medical treatment under the guidance of an appropriately trained vet.
8. Where customers are permitted to be photographed with animals, this should be free from evidence of bad practice. For more info see the guidance manual, *Unacceptable and Discouraged Practices*.
9. Complete, accurate animal stocklists, veterinary records and any appropriate licences or permits should be up-to-date and available for inspection. The required paperwork should be in place for any animals which have been acquired from the wild.
10. Where animals are involved in performances these should only involve natural behaviours and be free from bad practice. Training methods should be based on positive reinforcement only.

B. Additional minimum requirements for captive whales and dolphins

1. All water systems have an efficient, continuous filtration system, or sufficient water exchange, which has a back-up system in case of failure. This should maintain appropriate water temperature and quality for the animal/s. The water should not be polluted.
2. Pool ozone/redox and halogen ion content are monitored daily. Total free and combined chlorine should not exceed 1.8mg/l and levels should be tested twice daily for concentration of chlorine and/or oxidising agents.

3. Pool temperature is consistently maintained at a temperature appropriate for the species contained and is monitored daily. Appropriate pool temperatures range between 8°C and 32°C for cetacean, depending on the specific species (EAAM, 2003)*.
4. The pool's pH is consistently maintained between 7.4 and 8.2 and is monitored daily.
5. Pool salinity should not fall below 22 PPT**.
6. Pool coliform bacterial levels should not exceed 1,000 colonies/100ml of water and should be monitored at least weekly.
7. Where contact sessions are permitted, they are limited to 30 minutes, with a maximum of four sessions per day per animal with at least one hour rest period between each session. Keepers should ensure the animals are kept mentally stimulated between interaction sessions.
8. Customers entering pools are required to remove jewellery and shower both before and after these sessions to safeguard the welfare of the animals as well as the health and safety of customers.



Cetacean should only be fed high-quality fish.

* For example bottlenose dolphins require water temperatures of no lower than 10°C and no more than 32°C

** PPT = Parts per trillion

13

SECTION 5

Captive environments – managing the potential impacts

The following text describes how implementing best practice can maintain consistent welfare standards in captive environments. It provides detailed guidance around each of the Five Freedoms. Section 7 of this manual provides a quick reference table of what could be considered bad and what could be considered good practice.

Good feeding

Water

Cetaceans obtain the water they require through their food.

Food

High-quality food is key to cetaceans' wellbeing. Poor quality fish is detrimental to the health of cetaceans. Their diet should be nutritionally balanced; stored appropriately and hygienically prepared and presented. Food should be provided throughout the day, similar to the natural feeding behaviour of the animal species; which may either be continual grazing, or binging and fasting; or a combination of both. Consideration should be given to species, age, condition, activity, and the water and air temperature, and the diet altered accordingly ((EAM, 2003) Standards – The European Association for Aquatic Mammals).

Cetaceans would naturally seek out and hunt live fish and other sea creatures using their acute senses, eyesight and bio-sonar. In the captive environment, however, the cetaceans' diets generally involve eating dead and usually thawed frozen fish. Food should be regularly presented in an enriching way. Any vitamin or mineral supplementation should be individualised for each marine mammal as specified by an appropriately-qualified nutritionist (AMMPA 2008).

Highest-quality frozen fish – Cetaceans require high quality fish, comparable to the quality used to feed humans. To ensure both freshness and as high a nutritional value as possible, individually quick freeze (IQF) fish is preferred where fresh fish is not available in the quantities required. Fish should have clear eyes and red gills, indicative of freshness. Fish should never be thawed and refrozen.

Storage and hygiene – Frozen fish should be stored in freezers maintained at a maximum temperature of -18°C. It should be freshly thawed in a specified, secure refrigerator between 3°C to 7°C, away from public areas. Fish should not be thawed in water (this removes key nutrients) or in the sun. The length of time the food is stored, the method of storage and thawing, and the maintenance of thawed food should be controlled to minimise contamination and maintain nutritional quality (EAAM, 2003). The food preparation area should always be kept hygienic. Other animals (e.g. cats, dogs) should not be allowed near food preparation areas. Old and uneaten food should be removed from pools.

Variation and frequency of feeds – Varied species relevant to cetaceans' natural diet should be provided. Feeding should be undertaken throughout the day in several sessions, not only during performances; varying the times and amounts prevents lethargy and stereotypic behaviour.

Cetaceans should receive appropriate amounts of food for their nutritional needs. Diets should be based on the specific needs of each specimen, such as age, gender, reproductive conditions (e.g. pregnant, lactate female), level of physical activity, clinical condition, air and water temperature, and hydration.

Environmental enrichment – Food should be used to encourage natural behaviour and maintain mentally and physically healthy animals. Methods include: feeding tubes to encourage feeding underwater; freezing food in ice blocks; altering the feeding times; remote feeding to disassociate feeding with humans. Environmental enrichment can be simple, cheap, but very effective.

Public feeding is discouraged – To avoid risks of overfeeding and disease-transmission. This practice has been prohibited in Italy (Italian Ministerial Decree Nr469 (06/12/2001)). If public feeding is permitted, then it should be strictly controlled. Food should be suitable and nutritious for the species and every effort should be made to ensure all animals are fed similar amounts and the animals are neither over-fed, nor under-fed according to their daily requirements (EAAM, 2003). Food provided to the public for animal feeding should only be provided by the attraction. Amounts consumed by individual animals should be carefully recorded and food provided should only make up a small proportion of each animal's daily intake. Every effort is required to prevent disease transmission between people and cetaceans, such as handwashing before and after feeding. For more information on best practice relating to animal contact and feeding, see the specific guidance manual, *Unacceptable and Discouraged Practices*.



Over-feeding causes obesity.

Indicators of poor welfare

Poor fish quality, disease and under-feeding will result in poor body condition. This is indicated by skin condition, peanut head (defined as a depression behind the skull), visibility of the rib cage, hollowing out in the area below the dorsal fin. Over-feeding, perhaps as a result of uncontrolled public feeding, will cause obesity.

KEY POINTS

- High quality, appropriately thawed and varied marine species stored, prepared and offered in hygienic conditions.
- All individual animals should receive appropriate amounts of food and supplements respective to age, sex and condition.
- Animals look healthy and muscular; not overweight or underweight.
- Food should be used to encourage mental and physical stimulation, not only as a reward.
- We discourage public feeding of cetaceans, to avoid risks of overfeeding and disease transmission.

Good housing

All efforts should be made to replicate as far as possible an environment that cetaceans would experience in the wild. Besides the size and depth of the pool, suppliers should also consider the complexity and quality of the space. This will depend on the type of facility; for example, there are often significant differences between inland and coastal facilities.

Quantity and quality of space – Given the complexities of replicating wild environments for cetaceans in captivity, the requirements for size and available space depend largely on the numbers of animals housed. Essentially, the space should be as large as possible and it

should be complex, offering the animals both choice and opportunity to express most natural behaviours. There are no international standards for the keeping and management of cetaceans in captivity. Some of the existing standards are nationally regulated, but only in a few countries (e.g. the Bahamas, Brazil, Italy, UK and USA) and requirements vary between each country. The standards developed by the Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA), Regulation No 3 of 08/02/2002, are acknowledged to provide the most detail. Industry-regulated standards are also enforced through membership of a trade association, such as the European Association of Aquatic Mammals (EAAM, 2003 and AMMPA). For more guidance in this area, refer to Section 6, Supporting information.



A small pool that isn't adequate for dolphins in captive environments.



Pool size and depth should be as large as possible taking into account the number of animals.

An appropriate environment

An appropriate environment is vital to achieving a good standard of welfare amongst captive cetacean. Consideration should be given to the behavioural, social and psychological requirements of the species. The European Association for Aquatic Mammals (EAAM) states that 'pool size should satisfy the need for physical exercise, opportunity to enrol in natural behaviours and constructive social interaction. The Italian Ministerial Decree Nr 469 (06/12/2001) provides that cetaceans' captive environments should be designed to be extensive and safe but additionally, stimulating and enriching.

A range of guidance currently exists relating to suggested minimum pool sizes. As a general rule, pool sizes should be as large as possible and should take account of the body length of the species and the numbers of animals contained within the pool. The EAAM suggests that for up to six bottlenose dolphins, the water surface area should be at least 550m², plus 75m² per additional animal, with a depth



Interconnected pools may offer a more stimulating and enriched environment.

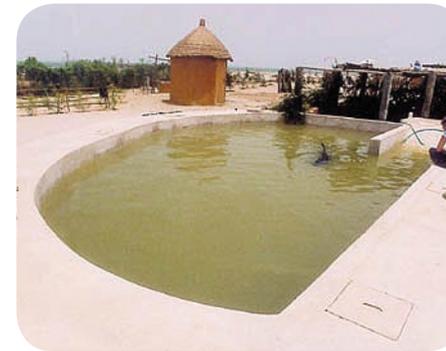
no less than 3.5m and a total water volume of at least 2000m³, plus 300m³ per additional animal. For further guidance on the various regulations currently in existence, please see the comparison of regulations table from WDCS (now Whale and Dolphin Conservation) in Section 6 Supporting information.

The supplier should ensure the exhibit is sufficiently complex to maintain mental and physical wellbeing: space to swim fast, dive and to escape tank companions or adverse weather conditions and to seek privacy through a system of interconnecting pools. Smaller pools may act as facilities for veterinary procedures or quarantine, but when not in use, all animals should have contact access to the display pool and the interconnecting pools. (AMMPA).

Water quality and treatment

Integral to the survival of any captive cetacean, the quality of water within the artificial environment should be constantly maintained to the standards specified for the species. All water systems should have an efficient, continuous filtration system, or sufficient water exchange, with a back-up system in case of failure. This is to maintain appropriate water temperature and quality; water should be free of pollutants. Water sources, salt constituents and contaminants can all contribute to problems encountered during the mixing of artificial seawaters, preparation of natural seawater, system start-up of the Life Support Systems (LSS), and daily operation.

LSS should produce acceptable water clarity and biological filtration. It should remove dissolved organics and minimise bacterial pathogens. Aquaria management and staff should fully understand these factors and be able to demonstrate competence in troubleshooting procedures. It should be possible to empty the pool quickly. When natural seawater is used, emergency procedures should be established to deal with sudden water pollution and poisonous algal blooms (EAAM, 2003).



The water quality is integral to the survival of any captive cetacean – an example of poor water quality.

Daily water monitoring should include:

- Appropriate filtration and water flow. Total filtration turnover time of each pool should be adjusted to maintain water quality. Typically this should not exceed four hours (EAAM, 2003)
- Appropriate ozone/redox and halogen ion content (should be free from residual dissolved ozone)
- Temperature consistently maintained between 8°C to 32°C (as is species specific) (bottlenose dolphins – no lower than 10°C or more than 32°C for dolphins), (EAAM, 2003)

- pH consistently maintained between 7.4 and 8.2
- Salinity consistently maintained between 15 to 38 grams of salt per litre of water. It should not fall below 2.2% salt (22ppt) (EAAM, 2003).

Coliform bacterial levels should be consistently maintained and should not exceed 1,000 colonies/100ml of water and should be monitored weekly (EAAM). It is recommended that UV-sterilisers are used as part of filtration. They are one of the best methods for killing coliform and numerous other bacteria. Bulbs should be changed every six months to maintain efficiency. If the average coliform reading (from two readings taken at 48-hour intervals) is higher than stated above, the water is considered to be inadequate for the animals and the pool should be emptied and treated with a sterilising agent (e.g. chlorine, ozone). Any chemical added to the pool water should not cause harm or discomfort to the animals. Total free and combined chlorine should not exceed 1.8 mg/l and levels should be tested twice daily for concentration of chlorine and/or oxidising agents (EAAM, 2003).

Any abnormal variations in water quality should be corrected immediately. Daily records should be taken and made available on request.

Coastal facilities are generally larger, potentially offer a more complex environment and the opportunity to provide enclosures within the cetaceans' natural marine environment. Coastal facilities should allow for the inclusion of natural substrates as well as natural enrichment items to be incorporated into animals' daily lives. Water quality should still be monitored in coastal facilities.

Inland facilities commonly provide more limited space for the animals in artificial tanks. These tanks are often filled using chemically-treated water, which is bad for marine mammals' skin and eyes. Chemically-treated water additionally means no live fish or plants can be placed inside.



Whether coastal or inland facilities, enclosures should be as environmentally complex as possible.

Air quality

Although water quality is essential, cetaceans breathe air just like humans and it is vital that facilities have sufficient ventilation. Air quality should be monitored daily for levels of dust, pollutants, smoke etc. As a guide, UK standards recommend a minimum of ten air changes per hour in enclosed air conditioned areas and 20 air changes per hour otherwise. (Supplement to Secretary of State's Standards on Modern Zoo Practice, 1990).

Lighting

Within indoor facilities, lighting should be appropriate and as close as possible to that of sunlight without being so intense it causes discomfort or distress. Variations of light and dark as per seasonal and daily changes should be applied. (Supplement to Secretary of State's Standards on Modern Zoo Practice, 1990).

Noise control

Filtration systems: some pool pumps are very loud and could cause behavioural problems in the animals. As a general rule, suppliers should seek to use the quietest available systems.

Surroundings: environmental considerations such as nightclubs or similar establishments will cause distress to the animals. In some situations, the level and regularity of boat or other traffic, which creates unwanted and harmful noise, may impact upon the animals' welfare (EAAM, 2008; AMMPA).

The noise level (including music) should be kept as low as possible for the frequency range between 0 and 60 kHz (normal maximum ambient sound pressure level 100 dB re 1 μ Pa).

Construction and maintenance: work should not expose the animals to excessive noise or cause foreign bodies and material to enter the pool or pollute the air.

Shelter and shade

Cetaceans should be able to shelter from adverse weather conditions at all times in order to minimise risk of severe discomfort, sunburn and potential death. Outdoor enclosures should provide sufficient shelter from extreme weather conditions and excessive sunlight (EAAM, 2003). At least one third of the pool area should meet this requirement, which should be mandatory for animal treatment areas (Italian Ministerial Decree Nr469 (06/12/2001)).



Shade is vital for all cetaceans to minimise risk of discomfort, sunburn and potential death.

Refuge from other animals and privacy from view:

all on – and off – show pools should be designed to reduce the risk of individual animals being unduly dominated by pool companions and to avoid the risk of persistent and unresolved conflict between group members or between different species within mixed exhibits. (EAAM, 2003). Enclosures should be designed to enable dolphins to retreat from public view, public interaction or performance at their will.

Indicators of poor welfare

The presence of abnormal levels of stress in the captive environment can cause the following: anorexia, evasive or avoidance behaviour, aggression. There may be changes to any of the following: skin coloration, ventilation, swimming behaviour, feeding behaviour, blood parameters, body condition. Stress can be caused by a number of factors, including poor water quality, dominance and bullying from other cetaceans and close proximity to people. A chemical imbalance in the water may cause cetaceans to exhibit erratic swimming and in severe cases to suffer early death.

KEY POINTS

- Water quality is integral to the survival of cetaceans in captivity; water quality should be maintained and regularly monitored.
- Facilities should make use of natural, regularly tested seawater.
- Quantity and quality of space should replicate the wild habitat as much as possible.
- On – and off – show pools should be of sufficient size and depth to permit the animals to move freely.
- Environments should be stimulating and enriching, encouraging natural behaviour.
- Air quality, lighting and noise control is vital to welfare.
- Outdoor enclosures should provide sufficient shelter from extreme weather and excessive sunlight.
- Animals should be able to escape other individuals, public view and interaction at all times.

Good health

It is vital that animal keepers are fully aware of the range of needs of the species and individuals in their care. A dolphin in a captive environment can suffer from prolonged inactivity, abnormal behaviours, obesity and muscular atrophy, which are likely to lead to poor welfare consequences and possibly death.

A safe environment: the floors, boundaries and any enrichment items or furniture within the cetaceans' environment should be designed and maintained to avoid causing injury or harm e.g. damaged, sharp or rusty areas (Italian Ministerial Decree Nr469 (06/12/2001), EAAM, 2003). Cetacean pools should be cleared of all litter and unintended foreign objects at least twice daily and after every human interaction.

Specialist veterinary care: all cetacean facilities should employ or contract an appropriately-qualified veterinarian with species-specific experience. (EAAM, 2003).

Hygiene and cleanliness: filtration systems should be in full working order with back-up systems. Pools should be regularly cleaned and uneaten food removed. Failure to do so may result in a build-up of harmful pathogens; these not only pose a risk to the animals' health but also to any humans involved in interactions with animals in the water. The wall and the bottom surfaces of the pools should be cleaned as often as necessary to maintain proper water quality (EAAM, 2003).



Pool size is important to maintaining healthy animals and reducing conflict risk between tank companions.

Personal hygiene: staff who have direct or indirect contact with the animals, including animal treatment and food preparation, should observe meticulous standards of hygiene. Staff should have showers, lavatories and washbasins. Suppliers should follow veterinary advice regarding sanitation. Customers interacting with cetaceans in any way should be compelled to take the relevant hygienic precautions both before and after any interaction. Smoking by staff and visitors should only take place in designated areas, which should not be in the vicinity of animals and animals' food preparation areas. (EAAM, 2003).

Quarantine areas for newly arrived animals: should be conducted based on the prior medical history of newly arrived animals and should be conducted in accordance with instructions from an appropriately qualified veterinarian for a minimum of 30 days unless otherwise instructed by the veterinarian. Areas used for quarantine should be separated from areas used by other captive individuals (by at least 15m).

Public access should not be allowed in these areas. Equipment used in quarantine areas to feed and clean animals should only be used with the quarantine animals or thoroughly cleaned and disinfected in line with instructions from an appropriately qualified veterinarian before use with non-quarantined animals. Members of staff authorised to work with quarantined animals should wear protective clothing and have access to washing facilities to prevent disease transfer. Where zoonotic risk is deemed to exist, necessary measures should be taken to reduce the risk to members of staff. (AMMPA, 2008).

Daily report forms: should be kept on each animal indicating behavioural observations such as anomalies and patterns, outside factors; the type and quantity of food consumption and the amount and type of interaction. Records should be kept for at least five years. (EAAM, 2003).

Health checks: including blood analysis, faecal smears and blowhole cultures of all animals should be undertaken at least quarterly or in line with the recommendation of an appropriately qualified veterinarian whichever is greater in frequency. Health and medical records should include date of examination; veterinarian's name; reason for examination; actions taken; medications; supplements; individual nutritional requirements; body measurements; blood test results; necropsy findings; photographs (when appropriate), physical characteristics; and any other relevant subjective and objective findings. Health and medical records should be kept indefinitely. (EAAM, 2003).

Pregnant cetaceans: should not be expected to interact with the public due to the risks that could be presented by members of the public. Swim-with interactions involving mother and baby dolphins together should be prohibited. Calves should not be separated from their mothers until naturally weaned. Where possible the mother and calf should be housed within the social group to permit interaction with conspecifics. However there should be an appropriate pool to isolate the mother and calf (EAAM) should it become necessary. Female cetaceans learn essential nursing skills from their mothers and also from other females in their population, sometimes acting as babysitters for other calves. Pregnant cetaceans should not be transported between facilities.

Stress: is not always bad for the welfare of an animal. For example, a certain degree of stress might be associated with normal behaviour such as seeking food or interacting with other animals. However, an animal in a pool devoid of enrichment, refuge or an appropriate social environment may well be stressed due to fear or frustration. This would be regarded as bad stress or distress, and contributes to poor mental and possibly physical health. Efforts should be made to enrich the captive environment, keepers should interact with the animals throughout the day and encourage natural behaviour. Examples of environmental enrichment include: underwater feeding tubes; varied (unpredictable) feeding times; fish within ice blocks; bubble or wave features; access to other parts of the tank; permanent furnishings in the tank, such as boulders, pebble substrate and ledges.

Indicators of poor health

Overt signs of ill health have been known to include poor body condition, such as peanut heads (defined as a depression behind the skull) and visibility of the rib cage, obesity, and lethargic or logging behaviour (floating at or near the pool surface). Obvious injuries include: cuts or skin lesions, which could result from public interactions or injury from a poorly maintained enclosure; ulcers around mouth or on other parts of the body; abnormal discharge from the eyes or the blowhole. The latter may result from poor water quality or high chemical concentration. Without a filtration system, the water in a closed pool environment will become dirty (the bottom of the pool may be obscured), contaminated by faeces and may have a bad odour.



If injuries occur an appropriately qualified veterinarian will need to be consulted immediately.

KEY POINTS

- A safe hygienic captive environment is vital; meticulous personal hygiene is imperative for staff and customers.
- Separate quarantine areas are provided for newly-arrived animals; no public access.
- Daily reports monitor the health of the animals and their surroundings.
- Some stress may be associated with normal behaviour but distress through fear or frustration is unacceptable.
- A veterinary specialist is employed or contracted to ensure the animals' health and wellbeing.
- Pregnant cetaceans do not perform or interact with the public and are not transported between facilities while pregnant. Public interaction with mother and calf is prohibited. Offspring not separated from their mothers until naturally weaned.



Captive environments should provide changeable enrichment, for example, bubble columns seen here.

Appropriate behaviour

Enrichment: as for all captive animals, enrichment is vital for the behavioural wellbeing of cetaceans. The use of smooth poolsides with chemically-treated water prevents the use of some natural substrate and/or natural enrichment items. Using enrichment tools such as feeding tubes, varied feeding times, fish within ice cubes etc. will provide short-term interest; it is critical these methods are regularly used and varied. Suppliers are encouraged to develop an environmental enrichment plan for the animals, review its effectiveness and record any changes in animal behaviour.

Housing within appropriate social groupings: cetaceans are usually social animals so they should be housed with appropriate pool companions of the same species or species known to be compatible. This will enable the animals to display social behaviour crucial to their wellbeing. However, groupings within captivity may be artificial (comprising unrelated individuals)

and put individuals at risk of stress and aggression from pool-mates. UK Standards and the Alliance of Marine Mammal Parks and Associations (AMMPA) in the USA prohibits the display of solitary animals: 'unless under direct supervision of the attending veterinarian and when essential to the animal's health and wellbeing'. Each animal should, however, be able to seek refuge from their pool companions (to escape conflict or stress) by moving to another area of the tank or to interconnecting pools.

Social in nature, cetaceans should never be housed alone; in compatible pairs is a minimum but four or five animals or more is recommended. Facilities should be able to separate incompatible animals (in enclosures that are equally large and attractive). All-female groups are usually compatible (and seen in the wild); all-male groups may also be possible, but they require regular observation to ensure no aggression and bullying between pool companions.



Cetaceans are social animals and should be housed in social structures similar to those in the wild.

Indicators of poor welfare

Stress can be caused by a lack of mental and physical stimulation, limited or no social interaction, inability to escape from aggressive tank companions or as a result of public/trainer interaction. It can cause changes to personality, interaction with tank companions, skin coloration, ventilation, swimming behaviour, feeding behaviour and body condition. Abnormal behaviour may also develop including logging (continuous floating at or near the pool surface), stereotypical route-tracing and repetitive play with an object (which appears to have no obvious function).



A dolphin with rake marks; this may be an indicator of heightened aggression between animals, inappropriate housing companions or poor welfare.

KEY POINTS

- The facility operates a regular and varied environmental enrichment programme that includes objects, toys, devices and procedures to meet the animals' behavioural needs.
- Cetaceans are housed in appropriate social groups and can seek refuge at will.
- Animals appear to behave 'normally' without signs of stereotypic behaviour, or other forms of abnormal behaviour.

Protection from fear and distress

Fear and stress may result from one or more factors, not all of which may be apparent in the animals' environment or in the animals' behaviour. Significant stress can have detrimental health consequences. We recommend that animals have an opportunity to escape human interaction and aggressive conspecifics to safeguard against animal distress.

Some performance behaviours can be both harmful and enriching for the animal. It is therefore the duty of the facility and trainers to keep an appropriate, varied schedule for each individual animal based on its current mental and physical condition – therefore reducing the chance of physical and mental stress. (EAAM, 2003).

Public interaction

Where public interaction occurs, the following requirements should be adhered to in order to safeguard both animal welfare and customer health and safety:

- Direct interaction with the public may carry a risk of injury or disease transmission for both people and animals. The attraction should ensure customers receive a clear and concise briefing before the interaction. Potentially harmful items, such as jewellery, should be removed (Animal and Plant Health Inspection Service (APHIS))
- All customers should be accompanied by experienced, trained staff in a ratio that ensures the risks to both animal welfare and public health are satisfactorily managed. The ratio should take account of group size and activity. The minimum ratio should provision for emergencies/incidents; one member of staff can remain with the group while another seeks assistance
- Diseases are potentially transmissible between humans and dolphins therefore humans should be instructed to shower before and after any interaction
- Customers who appear unwell, e.g. coughing, sneezing, should not be permitted to enter the water and interact with the animals
- Dolphins should only participate voluntarily in interactions and if they demonstrate unwillingness, they should not be forced to participate
- The length and frequency of interactions should be carefully monitored and controlled. A one-hour interaction is recommended including time for an educational commentary about dolphins, a clear briefing on conduct, people to change, shower, get in and out of the water, then shower and change again. The dolphin should interact with the public for no more than 30 minutes. Following a 30-minute interaction session, the cetacean should have at least one hour to rest before the next session or performance. An animal should have no more than four interactions per day
- The number of daily interactions will depend on the facility and the number of individual cetaceans involved in the public interactions. The absolute guiding principal is that the number of public interaction periods should not be detrimental to the animals' welfare or health by contributing to abnormal stress or exhaustion. If facilities have numerous animals and can rotate animals for sessions, this will enable longer rest periods (Foster J, pers. comm., 2012), which is recommended. In the USA, interactive sessions with cetaceans should not exceed two hours per day in total. There should be at least one period in each 24 hours of at least ten continuous hours without public interaction (AMMPA 2008; APHIS)

- A veterinarian, competent in cetacean health and welfare, should be consulted over the number of interactive sessions/performances per day, for each animal
- It is the trainers' duty to keep the animals mentally stimulated throughout the day, especially between the performances; to implement an effective programme of environmental enrichment and most importantly, to vary the animals' routine; to individually assess the animals under their care to ensure high standards in animal welfare and public safety
- We recommend that animals always have an opportunity to escape human interaction. Pools should be extensive and complex enough to provide areas of refuge
- In addition to the above requirements, suppliers should have a behaviour and management plan for each type of interactive activity offered to the public. As a minimum, animal trainers are required to meet the training guidelines of the International Marine Animal Trainers Association.



Public interaction should only happen under constant supervision.

Public feeding

If public feeding is permitted it should only occur in the presence and under the supervision of a sufficient number of knowledgeable, identified employees or attendants, who should ensure the cetaceans receive the proper amount and type of food. (EAAM, 2009).

Photo opportunities

Photo opportunities where cetaceans are required to beach themselves or are manipulated for the photograph should be prohibited. Animals should remain in the pool at all times and not be subjected to activities likely to cause significant stress, injury or discomfort.



Dolphins should remain in the pool at all times and should never be beached for photos.

Specific interactive behaviour guidance

Activities involving cetaceans being trained to jump out of the water: cetaceans have a series of physiological responses to being out of water; they are basically weightless in water and their bodies respond to being aground in a way that can be harmful if the action is repeated or prolonged. Evidence indicates that cetaceans can go into shock, could injure themselves or die as a result. A pregnant captive cetacean should never be asked to beach herself as this may put too much pressure on the foetus. Preferred practice is to use a sloping poolside, where the cetacean's body is still partially in water. Beaching should only be performed if it has been deemed necessary by a veterinarian (see Veterinary care section below).



Beaching out of the water should only happen if it is deemed necessary by a veterinarian.

Foot pushing and dorsal pulls: where a dolphin uses its rostrum to push people or uses its fins to pull people. There is an on-going debate as to whether such activities have the potential to cause stress and/or injury to the dolphins involved. Advocates advise that such activities are not detrimental to animal welfare whilst critics argue that such activities have the potential to cause muscular-skeletal damage or undue levels of stress on the cardio-vascular systems. It is clear from the



An example of foot-pushing.



An example of a dorsal pull.

debate that further robust research is required to allow a conclusive position to be reached regarding the implications of these activities. Where such activities are permitted, suppliers should take account of customer height, weight and age in terms of permitting individuals to participate in these interaction experiences.

Kissing a dolphin's rostrum: this can potentially transmit disease and customers should be informed of these risks before the activity. Direct contact with, or entering pools with infected animals can pose a risk to public and dolphin health. (See Section 2, Visitor safety, for risks associated with disease transmission.)

Animal training methods

These should be based on positive reinforcement (providing praise and reward) and never deprivation or physical or mental abuse (AMMPA). Training should only be undertaken by an individual with at least three years' experience in the training and husbandry of marine mammals (EAAM). Detailed animal training protocols should be produced and made available for inspection (AMMPA). Trainers should seek to keep the animals mentally stimulated throughout the day, especially between performances/public interaction to prevent boredom. Animals should not be trained to undertake tasks that have no relation to their natural behavioural repertoire unless deemed necessary by a veterinarian for veterinary procedures. All suppliers should maintain a training management plan that describes the training programme, objectives and methods, and considers each animal's behaviour, temperament and condition (EAAM).



Animals should not be trained to undertake tasks that have no relation to their natural behaviour.



Riding on beluga as part of a performance.

Animal performances

These should not involve abusive practices, excessively loud music that could be damaging to the animals, actions that could harm the animals or deprive the animals of their basic needs. The animal performance should have a high educational value and focus on biological and conservation facts.

An example of a practice during performance which does not portray the natural attributes would be dolphins spinning hoops for example, or simulating physical interactions with humans.

Veterinary care

Veterinary procedures should only be carried out under the guidance of and in the presence of a veterinarian, sufficiently trained and experienced in cetacean health and husbandry. Cetaceans should only be removed from the water when absolutely necessary for veterinary or husbandry purposes. This should only be permitted under the supervision of an experienced veterinarian or experienced trainer (Italian Ministerial Decree Nr469 (06/12/2001) and the animal should be kept wet throughout, preferably surrounded by shallow water.

Conflict between pool companions

Conflict can and does occur. This may be exacerbated by unnatural or inappropriate social grouping of individuals/mixed species, overcrowding and dominance. Unnatural group structures of social animals may result in animals being injured or even killed. It is therefore vital that trainers monitor and record animal behaviour daily to prevent conflict. Signs of conflict include excessive teeth scratches (known as rake marks) on the dolphin's skin. It is important to note, that rake marks may also result from natural aggressive behaviour between individual dolphins exercising dominance and disciplining each other in their social structure.

An animal should always be provided with refuge to escape conflict with other animals and minimise stress, particularly if that animal is pregnant, raising young or is injured. Pools should be extensive and complex enough to fulfil these needs.

Indicators of poor welfare

Symptoms of abnormal stress can include: anorexia; evasive or avoidance behaviour; aggression; changes to skin coloration, ventilation, swimming behaviour, feeding behaviour and body condition. Stress can be caused by a number of factors, including proximity to people and/or inappropriate and potentially harmful human interaction, such as teasing with food, grabbing, touching eyes or the blow hole.

KEY POINTS

- Animal handling and contact by the public should be discouraged.
- Where the public is permitted to enter the pool, feed the animals or be near the animal for a photo, this should be supervised, and the number of visitors restricted and controlled.
- The dolphin should interact with the public for no more than 30 minutes; we recommend a maximum of four interactions/day. One hour of rest should follow each performance.
- Photo opportunities should be free of bad practice.
- Cetacean performances and training should not involve abusive practices.
- Animals have a suitable environment that permits refuge and privacy from pool companions and public view/interactions at all times.
- Where the public is permitted to enter the pool/pool area, they should be appropriately briefed on desired conduct, they should be supervised and the number of visitors restricted to safeguard cetacean welfare.

SECTION 6

Supporting information

Since the ratification of the Convention on Biodiversity (CBD) in 1992, zoos, marine parks and aquaria worldwide have been encouraged to raise awareness about the environment, biodiversity and endangered species and current threats to biodiversity, thereby encouraging people to prevent the demise of endangered species.

Some zoos have responded by creating and seeking to implement a conservation and education strategy: the World Zoo and Aquarium Conservation Strategy (WZACS).

In Europe, the EC Zoos Directive also requires zoos (which includes captive dolphin facilities) to be licensed, to meet standards of animal welfare and husbandry, to take part in conservation programmes and to educate the public about conservation and specifically about the animal species on display. The EAAM requires all their members to have an education policy and to have at least one member of staff responsible for its implementation.

Education

Each animal attraction should:

- Have an education strategy and an active education programme to engage the public
- Have at least one trained member of staff dedicated to delivering the education programme
- Have facilities/services to deliver the programme to the public, schools etc.
- Display accurate information about the animal species exhibited at the relevant enclosure. This information should include: the species name (both common and scientific); biological characteristics; social status; description of natural habitat; threats to the animal species in the wild
- Ensure that animals used in performances are only required to demonstrate natural behaviour
- Provide a few interesting facts on each species, to capture customer attention whilst being informative.

Conservation

Each animal attraction should:

- Participate in conservation programmes
- Raise awareness and funds for conservation projects
- Actively conserve biodiversity and inform the public about conservation efforts in the wild
- Where appropriate, support captive breeding as opposed to acquisition from the wild
- Only ever receive acquisitions where an NDF report was established ahead of the acquisition
- Only ever receive acquisitions from the wild or from other attractions (loaned animals) that have been captured and traded in accordance with the requirements of CITES.



Animals used in performance should only be required to demonstrate natural behaviour.

Trade, legislation and regulation

Trade

International trade in cetaceans (wild and captive-bred) is regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The convention was established to ensure trade in all animal and plant species listed in its appendices is not detrimental to the survival and viability of local, regional and global wild populations.

Cetacean listings on CITES

Species	CITES listing
Bottlenose dolphins	Appendix 2
Orca	Appendix 2
Beluga whale	Appendix 2

In the European Union, all cetaceans are listed under Annex A of EU Regulation 101/2012, for which the EU has adopted stricter domestic measures.

Trade in wild-caught cetaceans

The export of a CITES-listed species by a party (signatory country) to CITES is dependent on a Non-Detriment Finding (NDF) being established by the exporting country.

An NDF is a finding that the export 'will not be detrimental to the survival of that species'. The NDF should be based on scientific studies of the abundance and status of the wild population from which the animal was taken, as well as a scientific assessment that shows that trading the animals (or their parts) will not deplete the wild population. It is not a requirement of CITES for an NDF to be formally written down or published. Anyone wishing to confirm that an adequate NDF has been made in relation to the export or import of a species, will need to contact the CITES authorities in the exporting and/or importing country.

The IUCN 2002-2010 Cetacean Action Plan goes further than CITES and states that: 'Dolphins should not be captured unless that specific population has been assessed and it has been determined that a certain amount of culling can be allowed without reducing the population's long term viability or compromising its role in the ecosystem.'

The IUCN Cetacean Specialist Group has confirmed that the capture of dolphins from the wild (e.g. the Solomon Islands) may be detrimental to the populations affected and that captures may have occurred without a CITES Non-Detriment-Finding (NDF). Cetaceans are collected for dolphinariums by a drive fishery, used primarily in Taiji and Futo, Japan. Documented in the feature film *The Cove*, this involves a flotilla of small boats that herd cetacean groups into shallow water for selection before sale to public display facilities, or slaughter for human and pet food and other products. In the 2003/2004 season, 78 cetaceans were sold to aquaria and dolphinariums by hunters in Taiji. Of note, EAAM and the World Association of Zoos and Aquaria (WAZA) have declared strongly against drive hunts.

Wild capture of cetaceans is already prohibited by the following:

- Accobams, the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (www.Accobams.org)
- Mexican moratorium on the capture of cetaceans in its waters, 2001
- Cartagena Convention for the protection and development of the marine environment of the Wider Caribbean Region (1983)
- Chilean Fisheries Decree 225 (2005)
- Regulations for the Operation of Activities relating to Cetaceans in Costa Rica (2005).

It is now widely recommended that wild-capture should not be conducted and that attractions seek to disassociate themselves from the import of wild-caught dolphins and move towards sourcing new acquisitions through captive breeding programmes.



Dolphins caught during a dolphin drive, a practice which has been condemned by many.

Trade in captive bred cetaceans

Captive facilities should only import cetaceans from other captive facilities. They should ensure that no transfer will lead to further wild captures (without a valid NDF) being made to replace the animals moved from one facility to another.

Any import and export should comply with CITES regulations and be supported by the relevant import/export permits.

Regulation of dolphinariums

The keeping of dolphins in captivity (for entertainment or commercial purposes) is prohibited in Switzerland (2012), Croatia (2009), Slovenia (2008), Costa Rica (2005), Chile (2005) and Cyprus (1997). Performance – but currently not keeping – was prohibited in Greece (2012). From 2002, Hungary banned all dolphin imports.

There are thought to be hundreds of dolphinariums in the world and 34 facilities in the EU (EU Zoo Inquiry 2011). All EU facilities, except those in Bulgaria, are required to meet the requirements of the EU Zoos Directive 1999/22 (requiring standards in the conservation of biodiversity, public education and animal husbandry). In the USA, all captive marine mammal facilities are required to comply with standards in the care and maintenance of marine mammals held in captivity (Animal Welfare Regulations, 2002), and are inspected and enforced by the Animal and Plant Health Inspection Service (APHIS).

While there is no specific global or regional legislation specific to the keeping of dolphins in captivity, a number of countries have legislation (e.g. Argentina, Bahamas, Belgium,

Brazil, Italy, United Kingdom and USA), or guidelines (e. Finland, Germany, Poland). Members of industry associations (e.g. European Association of Zoos and Aquaria (EAZA), European Association for Aquatic Mammals (EAAM), Alliance of Marine Mammal Parks and Aquaria (AMMPA)) are expected to comply with established industry guidelines/standards.

In the USA, regulations for the care and maintenance of marine mammals (part of the Animal Welfare Act) impose standards that include requirements relating to space, sanitation, water and air quality, temperature and veterinary care. (Animal Welfare Regulations, 2002)

The most detailed and important guidance is:

- Brazilian Regulation No 3 of 08/02/2002 (IBAMA)
- Animal Welfare Regulations Revised January 1, 2002, Code of Federal Regulations
- Annex G (Supplement to the Secretary of State's Standards of Modern Zoo Practice) Additional Standards for UK Cetacean Keeping
- Italian Ministerial Decree Nr469 (06/12/2001).

The table on pages 36-38 provides a comparison between these regulations.

Comparison of regulations: table from WDCS (now Whale and Dolphin Conservation) for the SPAW Convention in the Caribbean. (WDC).

UK (1998), published in Defra 2004	Italy 2001	Brazil 2002	USA 2002
Width and breadth of primary enclosures			
Based on minimum horizontal dimension (MHD), defined as the diameter of the largest circle that can be inserted within an enclosure, and the results for the two reference species: <i>Tursiops truncatus</i> (7m) and <i>Orcinus orca</i> (15m).	At no point should the minimum horizontal dimension be less than the 7m diameter of the largest circle that can be drawn in the tank.	The pool in the main enclosure shall comprise of a circle with a diameter equal to the minimum horizontal distance (MHD) for each species. MHD for cetaceans: 14m.	Space requirements are given for two different groups of animals. The MHD of a pool for Group I cetaceans (e.g. <i>Tursiops truncatus</i> , <i>Orcinus orca</i>) shall be 7.32m or 2 x average adult length of longest species housed. Group II cetaceans (e.g. <i>Delphinus delphis</i> , <i>Lagenorhynchus spp.</i>) 7.32m or 4 x average adult length of longest species.
Volume			
Minimum volume for any primary enclosure should not be less than 1000m ³ for up to five <i>Tursiops truncatus</i> plus a further 200m ³ for each additional animal over five. Orcinus orca: minimum volume for five: 12,000m ³ and for each animal over five, a further 2500m ³ . Dimensions to provide sufficient space to enable animals to take exercise, protect them from undue dominance/conflict & provide for other needs.	Minimum volume, for up to five <i>Tursiops truncatus</i> should not be less than 1600m ³ plus a further 400m ³ for each additional specimen. Dimensions to provide sufficient space to allow the animals to develop motor activities, protect them from unwanted dominance/conflicts and meet any other needs they may have.	Minimum volume for up to two <i>Tursiops truncatus</i> or <i>Delphinapterus leucas</i> : 1600m ³ plus 400m ³ per additional animal.	A pool of water housing cetaceans which satisfies MHD & meets minimum depth requirement will have sufficient volume & surface area to hold up to 2 Group I or 4 Group II cetaceans. If additional cetaceans are added, volume may have to be adjusted (formulas are given).

UK (1998), published in Defra 2004	Italy 2001	Brazil 2002	USA 2002
Depth			
Minimum vertical dimension (MVD) should be equivalent to twice the average body length of the species. Enclosure depths may be varied by up to 20% of MVD to provide Minimum Average Enclosure Depth: <i>Tursiops truncatus</i> : 5.6m, <i>Orcinus orca</i> : 12m.	Water depth should never be below 3.5m and should have a minimum depth of at least 4.5m in at least half of the total surface area of the tank.	Minimum depth for <i>Tursiops truncatus</i> : 6m for <i>Delphinapterus leucas</i> : 7m.	Minimum depth requirement shall be one-half the average adult length of the longest species or 1.83m – whichever is greater.
Holding/secondary accommodation			
Holding pens, if provided, only to be used briefly, except on direct veterinary advice.	Specimens may only be isolated in secondary sections for brief periods unless there is specific medico-veterinary prescription.	Animals shall have access to the biggest aquatic space possible for at least 90% of the day. Pools in the quarantine, respite and overflow areas are additional resources and shall not be subject to the minimum spatial requirements of those in the main and rehabilitation areas. Businesses & institutions shall take into consideration: a quiet, confined area aimed at lodging females & their new-born calves &/or pregnant females, with a solarium; an overflow area or group of enclosures & installations for the maintenance of surplus animals & those awaiting transfer elsewhere, off limits to the public. Businesses & institutions shall have a specific area for rehabilitation.	Temporary holding facilities with properly designed facilities shall be provided for isolation, medication, treatment, transfer & training. Pools & tanks may be less than minimum size when used in special situations when prescribed by the professional staff for temporary usage. Such enclosures shall not be used for permanent housing or periods longer than specified by attending veterinarian.

UK (1998), published in Defra 2004	Italy 2001	Brazil 2002	USA 2002
Medical facilities			
All establishments will provide facilities for medical care. Hospital facilities may contain pools of less than the minimum dimensions, but with due regard for the volumes necessary for water processing in isolation, and should allow easy handling and medication.	All units should have tanks for medico-veterinary treatment. They may be smaller than the minimum dimensions provided for and should be physically isolated from the tanks used for keeping, to prevent transmission of pathogens. They should also have a separate water-filtering device.	No specific provisions.	See above.
Free space above pool			
No specific provisions.	The free space above covered tanks should be at least 7m.	Covered areas should have a minimum height of 3m above water level.	No specific provisions.



Part of a pod of wild dolphins.

SECTION 7

Examples of best management practices – quick reference table

Five Freedoms	Examples of bad practice	Best practice
1. Good feeding	<ul style="list-style-type: none"> Poor quality, thawed fish of limited species. Feeding by hand, above the water. Unsupervised public feeding. Thawing frozen fish in water or in the sun. Limited feeding sessions. Allowing food brought by the public to be offered to dolphins. Not enforcing hand-washing before and after any interaction. 	<ul style="list-style-type: none"> Highest quality, thawed fish (varied species), stored in a freezer at a constant temperature and prepared in hygienic conditions. Enrichment devices to encourage natural behavioural feeding underwater. Monitored feeding of animals within daily feed amount; hand washing mandatory. Fish thawed in a specified, secure refrigerator between 3°C-7°C, away from the public areas. Feeding should be undertaken throughout the day in several sessions. Food should be solely provided by the facility. There should not be any opportunity to feed any unauthorised food/items. Ensure hands of personnel and public are washed before and after any interaction.



Five Freedoms	Examples of bad practice	Best practice
2. Good housing	<ul style="list-style-type: none"> • Cramped conditions that restrict animal's ability to express natural locomotive behaviour. • No ability to rest or seek shelter from humans/other captive individuals. • Artificial, inland smooth-sided swimming pool. • Poor water quality. Inefficient filtration. • Poor air quality, smoking allowed near pools. • High noise levels – filtration systems, surroundings (boat traffic, construction, nightclubs, bars). • No shelter from adverse weather conditions (sunshine). • No refuge area provided, individuals discouraged from entering refuge areas. 	<ul style="list-style-type: none"> • Greater space, the opportunity for social animals to interact with conspecifics. Complex environment allows the animal(s) to express natural locomotive behaviour. • Access to private areas away from public and tank companions. • Extensive, complex coastal environment and appropriate, safe enclosure borders. • Pool water kept in consistent conditions (salinity/pH(etc.) and monitored daily. • Air quality monitored daily. • Quiet filtration system. Facility away from noise. • At least one third of the pool is shaded from sunlight and other elements. • A complex set of pools available to individuals at all times.



Five Freedoms	Examples of bad practice	Best practice
3. Good health	<ul style="list-style-type: none"> • Discharge from eyes, nose or blowhole; open wounds; signs of malnutrition. • Cuts, abrasions, wounds from environment. • Dirty water containing foreign objects, uneaten food, etc. • Veterinary consultant unavailable or not trained in specific species at facility. • No hygiene protocol ensuring regular cleaning of facilities and appropriate staff conduct. • Poor monitoring resulting in harmful water quality. Inefficient filtration. • No monitoring of air quality within the facility and surrounding the pools. • Chemically treated water. • Infrequent health checks and insufficient daily reporting on individual animals. • Pregnant individuals, or mothers and young made to perform. Females separated from their young. 	<ul style="list-style-type: none"> • Bright eyes; smooth and clear skin; proud dorsal fin; muscular physique; clear blowhole. • Well-designed and safe environment designed and maintained in such a way as not to cause injury or harm (e.g. damaged, sharp or rusty areas). • Clean water free from foreign objects and uneaten food. • Specialist veterinary care available at all times. • Established hygiene protocol that includes staff training in appropriate methods. • Pool water kept in consistent conditions (salinity/pH etc.) and monitored daily. • Air quality monitored daily and records available. • Natural seawater monitored daily to ensure appropriate conditions. • Regular health checks, daily supervision and reports maintained for individual animals. • Pregnant individuals and mothers with young are not expected to perform in shows or interaction activities (for up to 12 months after giving birth).



Five Freedoms	Examples of bad practice	Best practice
4. Appropriate behaviour	<ul style="list-style-type: none"> Housed separately or alone, with no social contact. Lethargic; repetitive behaviour; surgical or physical modification of the skin, tissues, teeth or bone structure other than for the purposes of genuine medical treatment; heightened aggression or fear. Bare tank enclosure without enrichment. 	<ul style="list-style-type: none"> Housed in a social structure and interactions monitored in case of conflict. Ability for animals to express their natural behaviour – speed swimming, complex environment. Natural substrate within a set of complex pools and additional, varied natural enrichment items provided regularly. 

Five Freedoms	Examples of bad practice	Best practice
5. Protection from fear and distress	<ul style="list-style-type: none"> Heightened fear, no ability to seek refuge, constant direct human contact. Chasing, provoking or cornering by human or other animal. No social contact. Unsupervised, unmonitored public contact. All individual dolphins made to perform throughout the day and every day. Beaching of cetaceans onto poolside, out of the water involving bad practice. Unregulated public feeding. Animal performance to loud music, no educational commentary and performing unnatural behaviours. Insufficient rest time. 	<ul style="list-style-type: none"> Interaction rigorously limited, animals not handled used as a photographic prop out of the water. Ability to escape, move and seek refuge at ALL times. Cetaceans housed in appropriate social structure and interactions monitored in case of conflict. No unsupervised, unmonitored contact. In cases of public interaction, customer briefing, contact monitored and opportunity for cetaceans to seek refuge. Individual animal assessment, sufficient rest periods and rotate individuals. Beaching only for veterinary/husbandry reasons. Maintaining shallow water around animal. No feeding by the public. If feeding is undertaken, food consumption is monitored, no over-feeding or under-feeding, public to wash hands. A refuge area always available; ensure cleanliness; close monitoring. Swim-with programmes are based on natural experiences of being in the water with, but not being pushed or pulled by dolphins. Educational programme, no loud music, performance of natural behaviour and commentary outlining the natural aspects of the animals and their wild counterparts. Significant rest time between performances. 

Appendices

Appendix 1: sources of further information

Category	Further info source	Description
Organisation & Associations	Alliance Of Marine Mammal Parks And Aquariums (AMMPA), 2008.	Standards And Guideline for marine mammal parks and aquariums.
	Source: www.ammpa.org/	
Legislation & Conventions	US Department of Agriculture	Animal Welfare Regulations Revised as of January 1, 2002. Code of Federal Regulations. Title 9 – Animals and Animal Products, Section 1 – Animal and Plant Health Inspection Service, Department of Agriculture, United States. Subsection A – Animal Welfare, Parts 1-4.
	Source: www.usda.gov	
Legislation & Conventions	US Department of Agriculture	APHIS Swim-with-the-dolphin (1998). Sec. 3.111. Animal Health and Husbandry Standards (suspended). U.S. Department of Agriculture (USDA).
	Source: www.usda.gov	
Organisation & Associations	Australian Wildlife Health Network	Australian Marine Mammals and Zoonoses. Australian Wildlife Health Network (2011).
	Source: www.wildlifehealth.org.au/AWHN_Admin/ManageWebsite/FactSheets/UploadedFiles/121/Zoonoses%20(Marine%20Mammal)%2025%20May%202011%20(1.0).pdf	

Category	Further info source	Description
Legislation & Conventions	Cartagena Convention	Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region adopted 1983, in force 1986.
	Source: www.cep.unep.org/cartagena-convention	
Legislation & Conventions	Costa Rica Decree	Regulations for the Operation of Activities relating to Cetaceans in Costa Rica” (2005).
	Source: www.car-spaw-rac.org/?lang=en	
Legislation & Conventions	Report for US Congress	CRS Report for Congress. Marine Mammals in Captivity: Background and Management Issues in the United States. 97-517 ENR. (1997).
	Source: www.cnie.org/nle/crsreports/marine/mar-21.cfm	
Organisation & Associations	European Association for Aquatic Mammals	E.A.A.M. Standards and Guidelines for the management of bottlenose dolphins (Tursiops sp) under human care.
	Source: www.eaam.org/	
Legislation & Conventions	European Commission Directive	Council Directive 1999/22/EC, relating to the keeping of wild animals in zoos.
	Source: europa.eu/legislation_summaries/environment/nature_and_biodiversity/l28069_en.htm	
Legislation & Conventions	U.S Department of Agriculture	Marine Mammal Protection Act of 1972 (amended 2007)
	Source: www.usda.gov	
Legislation & Conventions	Ministry of Agriculture, Fisheries and Local Government. The Bahamas	Marine Mammal Protection Act 2005 (No. 12 of 2005). The Marine Mammal (Captive Dolphin Facilities) Regulation, 2005. Ministry of Agriculture, Fisheries and Local Government. The Bahamas, 3rd October, 2005.
	Source: www.bahamas.gov	
Legislation & Conventions	U.S Department of Agriculture	Marine Mammal Water Quality. ANIMAL CARE. 12.7.1. 11/04. Animal Care Resource Guide.
	Source: www.aphis.usda.gov/animal_welfare/downloads/manuals/eig/12.7_eig.pdf	

Category	Further info source	Description
Legislation & Conventions	Ministry of Environment – Italy	Ministerial Decree 469 of 06/12/2001. Regulations on the maintenance in captivity of dolphin specimens belonging to the species <i>Tursiops truncatus</i> , in application of article 17 paragraph 6 of law 93 of 23 March 2001.
	Source: www.minambiente.it/home_it/index.html?lang=it	
Organisation & Associations	Whale and Dolphin Conservation	Captive Cetaceans: A Handbook for Campaigners. A Whale and Dolphin Conservation Society.
	Source: www.wdcs.org	
Legislation & Conventions	Ministry of Environment, Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA), Brazil.	Regulation No 3 of 08/02/2002.
	Source: www.ibama.gov.br/	
Legislation & Conventions	National Ministry of Natural Resources and Human Environment (SRNyHA) – Argentina.	Regulations governing oceanariums.
	Source: www.argentina.gob.ar	
Legislation & Conventions	UK Secretary of States Standards on Modern Zoo Practice (Defra) and supplement.	Standards on Modern Zoo Practice.
	Source: www.defra.gov.uk/publications/2012/09/11/standards-zoo-practice-pb13806/ www.dauphinlibre.be	
Organisation & Associations	SPANNA	Survey of holiday makers and animal welfare concerns.
	Source: cdn.yougov.com/cumulus_uploads/document/n9rzwb071/YG-Archives-Spanna-Holidaying-070812.pdf	

Further reading

You Gov survey – Animal Welfare Abroad – 2012.
Available at: yougov.co.uk/news/2012/08/07/animal-welfare-abroad/

Rose, N.A., Parsons, E.C.M. and Farinato, R. 2009. The case against marine mammals in captivity (4th edition). The Humane Society of the United States and the World Society for the Protection of Animals.

WDCS & HSUS, 2003 – Biting the Hand that Feeds.
www.wdcs.org/submissions_bin/biting_the_hand.pdf

White, T.J. 2011. What is it like to be a dolphin? Section 19 in Brakes, P. and Simmonds, M.P. (eds) Whales and Dolphins – Cognition, Culture, Conservation and Human Perceptions. Earthscan, London and Washington.

Klinowska & Brown, 1988. Dolphinarium: Report of the Steering Group.
marineanimalwelfare.com/review.htm

www.care2.com/causes/outrage-grows-after-third-captured-dolphin-dies.html

Acknowledgements

Key contributors

ABTA would like to acknowledge and extend its sincere gratitude to the following key contributors to these guidance manuals.

Daniel Turner – Born Free Foundation

Nancy Brock – Thomas Cook

Will Travers – Born Free Foundation

Mirieme Hill – Virgin Holidays

Shelley Waterland – Species Survival Network

Shena Howie – Cosmos Holidays/Monarch Travel Group

Dr. Cheryl Mvula – Tribal Voice Communications

Sean Owens – TUI UK and Ireland

Afzaal Mauthoor – Destination Creators Ltd

Consultees

ABTA would also like to extend its gratitude to the following people who were consulted in the creation of these guidance manuals, and whose input has proved invaluable in achieving their creation. The following people have contributed to one or more of the manuals.

John Roberts, Director of Elephant and Conservation Activities, Anantara Golden Triangle and Golden Triangle Elephant Foundation

Jonathan Vaughan, BSc, MSc, IEEM. General Manager, Lilongwe Wildlife Centre

David Hancocks BSc. BArch., Consultant

Peter Fricker, Projects and Communications Director, Vancouver Humane Society.

John Denerley, Director, Galloway Wildlife Conservation Trust

Laura Higham, BVM&S, MRCVS. Veterinary Programme Advisor, SPANA

Manny Mvula MSc., Senior Consultant, Tribal Voice Communications

Elise Allart, Manager, Sustainable Tourism, TUI Netherlands

Dr Deepani Jayantha, BVSc, DESMAN G-Cert., Country Representative, Sri Lanka, Born Free Foundation

Stefanie Boomsma, Sustainable Tourism Coordinator, TUI Netherlands

Dr Sonya Hill, M.Phil., Ph.D. Applied Ethologist

Jonathan Chell, Marketing Manager, Elephant Hills Luxury Tented Camp

Nick Marx, MSc. Director, Wildlife Rescue and Care Programmes, Wildlife Alliance

Kimberley Wells MSc, Senior Welfare Advisor, The Brooke

Amanda Mayhew, Manager Ecotourism and International Trade Policy, Humane Society International

Kisor Chaudhuri, Independent Expert, Government Advisor (India) and Fellow of Royal Geographical Society.

Chris Lee, Trade Marketing Manager, Tourism Authority of Thailand

Sabrina Cambiaso, Director, Dominican Republic Tourism Board

Manuel Diaz Cebrian, European Regional Director, Mexican Tourism Board.

Andrew Greenwood MA, VetMB, DipECZM, CBiol FSB FRCVS, Partner, International Zoo Veterinary Group

Dr Jamie Lorimer, University Lecturer, School of Geography and the Environment, University of Oxford

Philip Mansbridge, Chief Executive Officer, Care for the Wild International

Kisor Chaudhuri FRGS, Wildlife Management Consultant, Haridwar, Uttarakhand, India

Manoj Gautam, Executive Director, Jane Goodall Institute Nepal

Cynthia Moss, Director, African elephant specialist, Amboseli Trust for Elephants

Dr. Brij Kishor Gupta, Evaluation & Monitoring Officer and Member, Expert Group on Zoo Designing Central Zoo Authority, Ministry of Environment & Forests, India

Kedar Gore, Director, The Corbett Foundation

Dr. Stuart Semple, Reader in Evolutionary Anthropology, Institute of Primate Tourism Research, University of Roehampton

Cathy Williamson, Captivity Programme Manager, Whale and Dolphin Conservation (WDC)

Alan Knight OBE, Chief Executive, International Animal Rescue

Nancy L. Gibson, Founder / Chief Executive, Love Wildlife Foundation

Kathy Gill, Strategy Director, Biosphere Expeditions

Dr Susanna Curtin, Senior Lecturer, Researcher in Eco/Wildlife Tourism, School of Tourism, Bournemouth University, UK

Professor Claudio Sillero, Bill Travers Fellow for Wildlife Conservation, WildCRU, Zoology, University of Oxford

Mr Marc Ancrenaz, Co Director, The Orangutan Project

Project management team

Daniel Turner – Born Free Foundation

Simon Pickup – ABTA

Shelly Beresford – ABTA

Statement from the Born Free Foundation

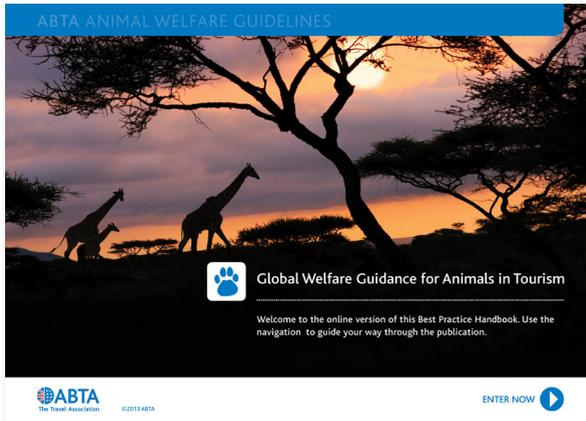
Each year, the Born Free Foundation receives thousands of calls from members of the public concerned by the suffering of animals that they witness whilst travelling. Born Free investigates these concerns and, as part of our follow-up procedures, contacts governments calling on them to draw up, improve and enforce animal welfare legislation. We also work with the travel industry which is ideally placed to influence the current situation and bring about positive change. Our extensive expertise in the science of animal welfare and wildlife conservation ensures Born Free can provide accurate and reliable information which can be used to tackle many of the negative and harmful practices that impact on the welfare of both captive wild animals and their free-living counterparts, as well as the habitats they depend upon. The Born Free Foundation is delighted that our experience has contributed to a landmark decision by ABTA to produce its ground-breaking *Global Welfare Guidance for Animals in Tourism* and six supporting guidance manuals which represent a significant step towards improving animal welfare standards of attractions associated with and supported by the tourism industry.

Appendix 2: photo captions and credits

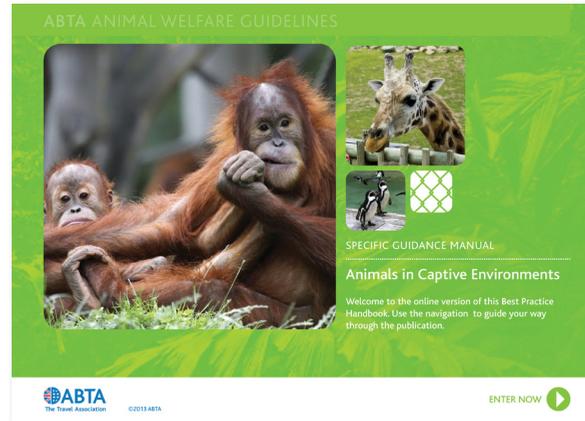
Page	Caption	Credit
4	Bottlenose dolphins.	G Parsons
5	Orcas in the wild.	Paul Spong
5	Beluga whale.	Brian Gratwicke
6	A dolphin show where the dolphin displays its jumping ability.	Born Free Foundation
7	Swim-with interaction is very popular with tourists.	Captain DJ
9	Attractions offering public interaction with dolphins need to protect both animal welfare and public health and safety.	Born Free Foundation
10	Dolphins are captured from the wild to stock the world's captive dolphin industry.	Eric Demay
11	Dolphin in captivity.	Stock image library
13	Cetaceans should only be fed high-quality fish.	Stock image library
16	Over-feeding causes obesity.	WDC
17	A small pool that isn't adequate for dolphins in captive environments.	Born Free Foundation
17	A small pool that isn't adequate for dolphins in captive environments.	Born Free Foundation
18	Interconnected pools may offer a more stimulating and enriched environment.	Born Free Foundation
19	The water quality is integral to the survival of any captive cetacean – an example of poor water quality.	Blandine Melis
20	Whether coastal or inland facilities, enclosures should be as environmentally complex as possible.	ACRES
21	Shade is vital for all cetaceans to minimise risk of discomfort, sunburn and potential death.	R Corner
22	Pool size is important to maintaining healthy animals and reducing conflict risk between tank companions.	Born Free Foundation
24	If injuries occur an appropriately qualified veterinarian will need to be consulted immediately.	WDC
25	Captive environments should provide changeable enrichment, for example, bubble columns seen here.	K Le Grange
25	Cetaceans are social animals and should be housed in social structures similar to those in the wild.	Born Free Foundation

Page	Caption	Credit
26	A dolphin with rake marks; this may be an indicator of heightened aggression between animals, inappropriate housing companions or poor welfare.	Born Free Foundation
28	Public interaction should only happen under constant supervision.	Born Free Foundation
28	Dolphins should remain in the pool at all times and should never be beached for photos.	Born Free Foundation
29	Beaching out of the water should only happen if it is deemed necessary by a veterinarian.	Milan Boers
29	An example of foot-pushing.	Born Free Foundation
29	An example of a dorsal pull.	Tim McDermott
30	Animals should not be trained to undertake tasks that have no relation to their natural behaviour.	Stock image library
30	Riding on beluga as part of a performance.	Born Free Foundation
33	Animals used in performance should only be required to demonstrate natural behaviour.	Born Free Foundation
34	Dolphins caught during a dolphin drive, a practice which has been condemned by many.	WDC
38	Part of a pod of wild dolphins.	Jim Capaldi
39	Over-feeding causes obesity.	WDC
39	Feeding should happen throughout the day for cetaceans in captivity.	Stock image library
40	Captive cetaceans need appropriately sized pools.	Born Free Foundation
40	Shade is vital for all cetaceans to minimise risk of discomfort, sunburn and potential death.	R Corner
41	Injured cetaceans should have access to appropriately qualified vets.	WDC
41	Regular health checks are recommended for cetaceans in captivity.	Stock image library
42	Cetaceans should not be housed alone without social contact.	Davies and Reid
42	Cetaceans should have regular interaction.	Born Free Foundation
43	Unnatural performances are unacceptable practice.	Milan Boers
43	Cetaceans should only take part in performances of natural behaviours.	Milan Boers

ABTA ANIMAL WELFARE GUIDELINES



Global Welfare Guidance for Animals in Tourism



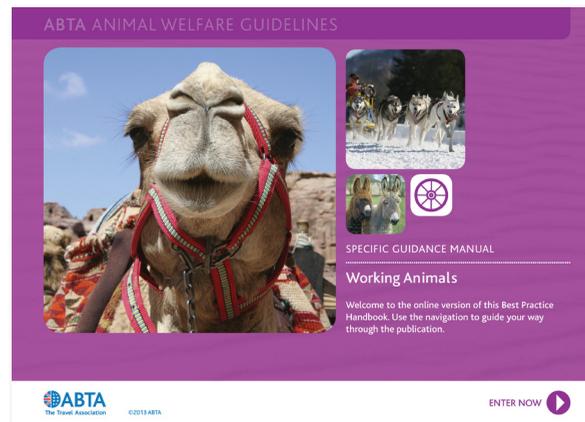
Animals in Captive Environments



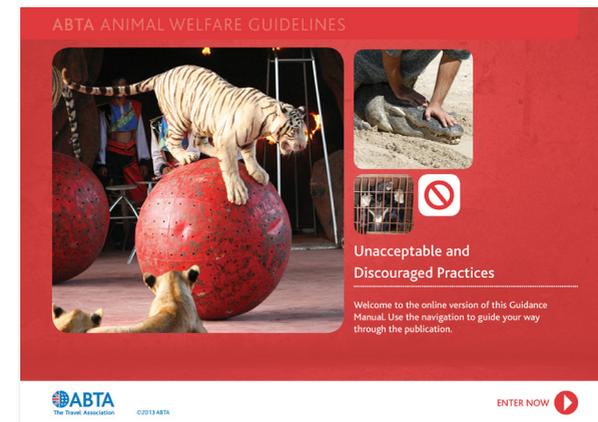
Elephants in Captive Environments



Wildlife Viewing



Working Animals



Unacceptable and Discouraged Practices

ABTA Ltd

30 Park Street, London SE1 9EQ

Tel: +44 (0)20 3117 0590

Fax: +44 (0)20 3117 0581

Email: sustainabletourism@abta.co.uk

Web: www.abta.com

Twitter: @ABTAtravel