Captive Cetacean Welfare and Status in the EU

WELFARE CONCERNS

- **Restrictive space:** The largest captive facilities are just a fraction of the size of the natural home ranges of whales, dolphins and porpoises (commonly referred to as cetaceans) (Tyack, 2009). Orcas, for example, may travel as far as 150 kilometres in a day, whilst the largest orca tank in the world is 70 metres long. When denied adequate space, large, wide-ranging carnivores commonly develop problems such as abnormal repetitive behaviour (termed stereotypies) and aggression (Clubb & Mason, 2003).
- **Limited social environment:** Captive dolphins sharing a pool are often unrelated, from different geographic regions or from different species, which can result in changes to natural group dynamics leading to dominance-related aggression, injuries, illness and even death (Waples & Gales, 2002). In the wild, a majority of cetacean species live in interrelated family groups, or pods. These highly intelligent, social species can be found in aggregations of 100 or more animals.
- **Environmental quality and complexity:** Captive facilities cannot provide an environment that simulates the complex natural marine environment. Some dolphinaria (e. g, in Belgium, Lithuania, Bulgaria) only provide indoor facilities, without natural light and with possibly insufficient air circulation. Most pools are smooth-sided, small and virtually empty of stimuli (Couquiaud, 2005).
- **Noise:** Loud music and the regular, repetitive noise of pumps and filters are thought to cause significant stress to captive cetaceans, who are highly dependent on their sense of hearing (Couquiaud, 2005).
- **Behavioural restrictions:** Training and performance in shows may provide some stimulation for captive cetaceans, but these behaviours are conditioned and are usually exaggerated or altered versions of natural behaviour (WDCS *et al.*, 2011). The natural foraging patterns of these oceanic predators are lost and the ability to hunt is denied. In captivity cetacean activity is related to the presence of trainers and an audience rather than prey movements.
- **Use of tranquillizers:** Diazepam (Valium® and generics) is used by the captive dolphin industry to control stereotypies and anxiety, recognised as common problems in dolphinaria (Knight, 2013).
- **Stress:** Handling, restraint, confinement, transport, isolation or crowding and an artificial diet lead to stress in captive cetaceans and, ultimately, a reduction in their life expectancy (WDCS *et al.*, 2011).
- **Early mortality:** Captive bottlenose dolphins may live as long as wild dolphins in the best facilities, but their annual mortality rates are still slightly higher (5.6% vs 3.9%, although this difference is not statistically significant) and in many facilities around the world, significantly higher, as poor quality housing and care contribute to ill health (Small & DeMaster, 1995; Woodley, 1997); orcas, on the other hand, have a significantly higher annual mortality rate in captivity than in the wild wherever they are held (6.2% vs 2.3%) (Small & DeMaster, 1995). Beluga whales appear to live about half as long in captivity as they do in the wild, based on tooth ring analysis (Stewart *et al.*, 2006).

CONSERVATION CONCERNS

- **Threats to wild populations:** Wild capture of cetaceans for the captive industry continues to be a threat to small, local populations (Reeves *et al*., 2003; Fisher & Reeves, 2005). Trade data indicate that 288 live cetaceans were imported into the EU between 1979 and 2010, in spite of a prohibition under EU CITES Regulation 338/97 on imports of cetaceans for primarily commercial purposes.
- **Non-compliance with EC Zoos Directive:** EU Dolphinaria, required to contribute to species conservation, are not undertaking meaningful scientific research to benefit the species in the wild and low breeding success has rendered the captive dolphin population not self-sustaining.

STATUS IN THE EU

- **Current numbers in Europe:** There are 33 captive facilities keeping an estimated total of 311 individual cetaceans in 15 EU Member States. Spain (11) and Italy (4) host the majority of facilities. Species include bottlenose dolphins (an estimated 285 individuals), orca (12 individuals), harbour porpoise (estimated 11 individuals), beluga whales (two individuals) and one Amazon River dolphin (September 2014).
- **EU legislation:** Fourteen EU Member States regulate dolphinaria through legislation implementing the EU Zoo Directive, which requires their commitment to species conservation, scientific research, public education and species-specific welfare standards. Five Member States (Belgium, Finland, Italy, Poland and the United Kingdom) have specific legislative standards for the keeping of cetaceans in captivity. The UK's high standards currently preclude maintaining dolphinaria in the country. Italy has some of the best standards, but these are rarely enforced.
- **Dolphinaria-free States:** Thirteen Member States do not host dolphinaria. Slovenia, Cyprus and Croatia prohibit the keeping of cetaceans in captivity for commercial purposes, Hungary prohibits dolphin imports, whilst Greece has banned all animal performances.

Cetacean species and numbers of individuals held in dolphinaria in the European Union

Country	*Bottlenose sp*	*Orca*	*Harbour porpoise*	*Beluga whale*	*Amazon river dolphin*	
Belgium	**7**					
Bulgaria	**6**					
Denmark			**3**			
Finland	**4**					
France	**29**	**6**				
Germany	**15**				**1**	
Greece	**7**					
Italy	**26**					
Lithuania	**8**					
Malta	**7**					
Netherlands	**37**		**8**			
Portugal	**27**					
Romania	**2**					
Spain	**100**	**6**		**2**		
Sweden	**10**					
TOTAL	**285**	**12**	**11**	**2**	**1**	**311**