

# WDCS

## Introduction.

**p.2** “Killer whales, more properly known as orcas, have been kept in captivity since 1961”  
“Highly-choreographed show routines, performed to a background of tired old rock songs, are presented as “natural behaviour”. Entranced, many of the spectators fail to register the bare concrete walls of the tank.”  
“...the docile, playful orca portrayed is far removed from the real animal”

“A growing catalogue of “accidents”, illnesses, failed pregnancies and premature deaths has forced a dramatic reappraisal of the suitability of orcas for confinement.”

“In 1989, at Sea World's San Diego park, a young female named Kandu rammed into a second female, Corky, with sufficient force that Kandu died almost instantly, in front of a horrified crowd of onlookers. In 1991, at Sealand of the Pacific in Canada, a young female trainer called Keltie Byrne was drowned by Sealand's three resident orcas after she accidentally fell into their tank. In July 1999, a 29 year-old man, Daniel Dukes, was found dead, draped over the back of male orca, Tillikum, at Sea World's Florida facility. We will probably never know the full story behind his death. Whilst undeniably the most tragic, these incidents were by no means isolated. Aggression between captive orcas and, equally disturbingly, aggression towards trainers, has increased in recent years. Disenchanted trainers and orca advocates alike have alleged that the mental and physical health of the orcas is highly compromised by the captive situation.”

“The reality of existence for the captives has become painfully obvious: cramped, chlorinated tanks, often inhabited by frustrated and unhealthy whales, performing circus tricks...”

Until 1992 “...no fewer than eleven adult orcas have died, eleven calves have died aged four years or under, and there have been at least six known stillbirths/miscarriages - giving the lie to the display industry's contention that captives are surviving longer.”

**p.3** “Attendance at several marine parks has declined in recent years and others have stopped displaying orcas altogether.”

## Section 1 The Showbiz Orca

**p.4** “First the facts:

- **At least 134 orcas have been taken into captivity from the wild since 1961. One hundred and six (79%) are now dead.**
- **Of the 107 which died, average length of survival in captivity was under six years**
- **Of 59 known pregnancies in captivity since 1968, only 23 calves (38%) have survived.**
- **Sea World has itself estimated that as much as 70% of its income derives from visitors**

**p.5** “At precisely the moment that his disembodied voice is describing the orca's 'interlocking teeth designed for ripping and tearing', one of 'these monstrous juggernauts of the deep' docilely approaches the stage, to be rewarded by a trainer who doles out a handful of dead fish from a steel bucket. The intense irony of this moment is lost on the audience.”

## **Section 2 Life in the wild**

### **p.10 Intelligence**

“...researchers attempting to define and quantify 'intelligence' agree that there are several criteria which may be measured objectively...”

“brain volume....brain convolutions...brain weight to spinal cord ratio. In humans, this ratio is around 50:1, in apes 8:1 and in horses about 3:1,. Bottlenose dolphins (close cousins to orcas) compare favourably to homo sapiens, with a ratio of 40:1.”

### **p.11 Echolocation, communication and dialect**

“In the realm of the orca, sound rather than sight is the dominant sense.”

“calls may travel as far as 10 km (6.2 miles) underwater, enabling individuals to keep in vocal contact with other pod members whilst foraging, even when out of visual range.”

“Young orcas apparently learn pod dialect by mimicking their mothers and other pod members.”

“Perhaps orcas consciously choose a mate who communicates in a different dialect, (therefore a member of a different pod), thus helping to avoid inbreeding.”

## **Section 3 Captivity: a one-way ticket**

### **p.19 2. Iceland: 1976 -1989 A total of 64 orcas were captured, of which 55 were taken into captivity (34 are now dead, 21 survive.)**

“Between 1955 and 1972, Norwegian whalers had taken around 300 orcas.”

“...Sea World's Don Goldsberry agreed to help two less experienced collectors, Jon Gunnarsson of Saedyrasafnid Aquarium in Iceland and W.H. Dudok van Heel from Dolfinarium Harderwijk in Holland. The trio adapted capture techniques using purse seine nets...”

“The team deliberately concentrated on capturing juveniles, since they were easier to handle and, it was thought, might adapt better to captivity. Orcas as young as two years of age were routinely taken.”

#### **Holding Areas:**

“In the early years, captured orcas were kept in floating pens located in Grindavik harbour...”

“f...rom this point, transportation is routine to final destination.' Other captives had to endure a journey of between four and 18 hours to a purpose-built holding facility at Hafnarfjord Marine Zoo. ”

maintained abroad for several years at a co-operating marine park.

“A permit application would then be lodged with NMFS for the eventual import of the animal. In this way, the original collector could take orcas from the wild, 'launder' them via a second facility and import them innocently as 'already captured' animals, a few years down the line. Although import permits issued by NMFS were required for every orca brought into the US, this has historically proved to be just a formality, since no permit application to import orcas from other countries has yet been denied.”

“This method of obtaining orcas was practised extensively by Sea World in particular, often making use of facilities such as Marineland (Canada), Windsor (UK) and Harderwijk (Holland). “

#### **Breeding loan.**

“'Breeding loan' is industry jargon for the judicious transportation of breeding age male or female orcas from one facility to another, with or without money changing hands. Sea World has received orcas from Holland, Canada and Britain under these convenient auspices.”

“Technically, the breeding animal remains the property of the supplying facility, (along with any second calf). However, to date, none of the orcas 'loaned' have ever been returned.”

- “ In October 1976, two females named Gudrun and Kenau were taken off Iceland by the consortium of Goldsberry, Gunnarsson and Dudok van Heel. Both were sent to Harderwijk for 'holding'. Kenau was imported to Sea World in June 1977. Harderwijk kept Gudrun, but over a decade later, in November 1987, she was imported by permit to Sea World, Florida, ostensibly on 'breeding loan'. Gudrun died in February 1996, just four days after her third calf was stillborn.
- In October 1977, the same team captured six Icelandic orcas, all were sent to Harderwijk, for 'holding'. One male, Magnus, died two months later, in December 1977. That same month, Sea World purchased and subsequently imported three other orcas from Harderwijk - Kona II, Kanuck II and Kandu V. Two females, Winnie and Hoi Wai, went to Windsor. Winnie was later imported by permit to Sea World, Florida in October 1991, again on 'breeding loan'. Winnie's Marine Mammal Inventory Report lists her collector as Sea World.
- Ulysses, captured in 1980, resided at marine parks in Spain until February 1994, when Sea World imported him as a breeding male...”

#### **p.27 Special deals: 'Strings attached?'**

“'Special deals' may be struck between the receiving and the supplying facilities. For example, Sea World sent three false killer whales to Harderwijk in partial exchange for Gudrun”

### **Section 4 Conditions in captivity: "Life in the tank."**

**p.28** “ I know of no marine mammals kept in captivity in natural conditions. As a matter of fact, there is an inherent contradiction in using the term natural to refer to captive circumstances.' (Professor Hal Markowitz)

**In the Wild...**

- Artificially salinated and chlorinated water usually replace natural seawater.
- Captives must learn to accept dead fish.
- Blood-bonds are replaced by forced associations, with orcas from different pods and different oceans being routinely mixed and matched.
- Calves are routinely moved from their mother at a very tender age. □ In 1999, at least four facilities keep a solitary orca, and Keiko is solitary in Iceland
- Natural daily routines and social interactions are replaced by forced and highly artificial show routines.
- Above all, the orca's quality of life is severely compromised.

The adaptations a wild-caught orca is forced to make in order to adjust to captivity are almost unimaginable.”

“If we take as a starting point the premise that captive animals should ideally be kept in conditions that approximate as closely as possible those found in their natural habitat, then it quickly becomes apparent that this is an impossible aim when applied to orcas. Orcas are the largest animals to be kept in captivity anywhere in the world.”

“Given that the captive situation can never hope to replicate their natural habitat, then the barest minimum requirements of orcas in captivity may be deemed as being: the provision of adequate food, a reasonable area in which to swim, and suitable companionship. But what about more complex, yet still vitally important needs, such as space for resting, play and socialising behaviour? What about the need for privacy, for room to escape from companions and other distractions if required?”

### **p.33 Pool design and water quality:**

“Cost is probably the primary factor governing the design of show pools, but other important factors include cleaning and husbandry requirements, and also the needs of the spectators. After all, if the onlookers ranged on benches surrounding the pool don't have a clear view of the whales, they simply won't return. So maximum visibility is a prime requirement...”

### **p.35 Acoustics and ambient noise:**

“Professor Hal Whitehead's 1990 paper on captive cetaceans compared the experience of a 'highly acoustic cetacean...[such as an orca] ..living in a tank with acoustically reflective walls, to that of a visually oriented animal, like a human, living captive in a room covered with mirrors on all walls and the floor. The experience is likely to be profoundly disturbing, especially over the long term.’ “

### **p.38 Survival rates and longevity:**

“Solid research exists on longevity in the wild, but reliable data is often lacking in the captive situation. Although the marine parks can obviously record the precise time of death of captive orcas, such deaths are usually veiled in secrecy...”

**p.39** “ In a special report for the 1990 meeting of the International Whaling Commission, scientists Peter Olonikh, Michael Bigg, and Graeme Ellis presented their best estimates of natural lifespans for orcas in the

## **p.40 Causes of death: 'What a shame about Shamu!'**

“Determining true causes of death can be very difficult. Part of the problem lies in incomplete or inconsistent record keeping by the marine parks and in gaining access to these records. Post-mortem records are only available for those orcas listed in Marine Mammal Inventory Reports and, most significantly, since necropsies - animal autopsies - are usually conducted 'in-house' by the staff veterinarian, they are unlikely to cast blame for the animal's death upon their marine park employer or other veterinarians.”

“...necropsy reports reveal that captives are not spared from parasites or natural toxins and commonly report infestation by such parasites as nematode, trematode and tapeworm.”

“...the captive situation appears to increase the incidence of some infections rarely encountered in wild populations.”

“Greenwood and Taylor noted that 'the high incidence of systemic mycosis ... is unusual and alarming [and is] uncommon in open air, natural sea water systems, [if] killer whales [were] kept under these conditions [they] may be considered less at risk.’”

## **p.40 Stress:**

“ 'To deny liberty to a wild animal involves the diminishing of that animal's life. It is an inherent characteristic of wild things to be free.. in almost all cases, the denial of this inherent characteristic involves stress, frustration, anxiety and even aggression.' (Professor Andrew Linzey, Animal Theologian, 1987)”

“It is estimated that stress may be a contributing factor in as many as 50% of captive deaths.”

“Marine parks commonly use 'Mylanta' and other anti-ulcer drugs.”

## **Incidents**

**p.47** “Graeme Ellis, a former trainer and now researching orca in the wild, maintains that a good training programme is one which keeps orcas mentally healthy and interested, whilst promoting trainer safety. 'It's not how many tricks you can train them to do in two months; it's how long you can maintain a whale's sanity... We seem to have a limited imagination when it comes to keeping these animals from becoming bored or neurotic.' “

“Some commentators feel that part of the problem has been an over-dependence upon young or inexperienced trainers, unfamiliar both with training signals and with the particular personality of each orca.”

“Ex-Sealand trainer Eric Walters.....maintained that some marine mammals at Sealand, including orcas, were frequently deprived of their full food ration if they failed to perform well.”

## **Section 5 Marine Park Miths.**

**p.57** “Captive breeding as a conservation tool is clearly not applicable in the case of orcas or bottlenose dolphins, the two cetacean species most commonly held captive. Neither species is regarded as endangered in the wild, no captive-bred orcas have been liberated and, to date, marine parks have not shown any interest in a release project.”

### **p.60 The incredible shrinking gene pool.**

“Observers have speculated that some unsuccessful pregnancies may be the result of in-breeding. In the wild, a healthy gene pool is maintained by the practice of matings taking place outside the immediate pod. Yet in captivity, orcas which are probably related have been allowed to interbreed.”

## **RESEARCH**

**p.62** “No aquarium, no tank or marineland, however spacious it may be, can begin to duplicate the conditions of the sea. And no dolphin who inhabits one of those aquariums .. can be described as a 'normal' dolphin. Therefore the conclusions drawn by observing the behaviour of such dolphins are often misleading when applied to dolphins as a whole.” (Jacques Cousteau, 1975)”

### **Research in the wild:**

“In fact, by far the greatest proportion of research on orcas has been carried out in the wild. “

### **p.63 Research in captivity:**

“ Captivity, by its very nature, frequently distorts the behaviour and vitality of the orca to an unacceptable degree.”

**“Sea World.....Turning its attention to Iceland as a potential capture zone and with an eye to NMFS regulations which required population estimates before issue of capture permits, Sea World again funded Hubbs, along with Johann Sigurjonsson of Iceland's Marine Research Institute, to conduct background research and a population census. This research produced a weighty 316 page volume of specially-commissioned scientific papers. Both incidents were clearly a question of commercial motives driving the scientific research agenda.”**

### **p.65 Research or husbandry?**

“Whilst the larger marine parks are eager to promote themselves as research institutions, the fact is that much of the research conducted is motivated less by the desire to increase scientific knowledge of orcas than by the necessity of keeping their captives alive. Hence, the need to improve husbandry and veterinary knowledge fuels the research agenda.

Sea World biologist Daniel Odell (1991) commented 'the first type of research we do is basic research. This research emphasises life history and husbandry parameters [and] is important for animal husbandry purposes.’”