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## **A review of dolphin shows at Italian dolphinaria: are they reflecting dolphin's "natural" behaviour? Is there anything educational about them?**

*By Joan Gonzalvo*

For over fifteen years I have been studying coastal dolphins in different areas of the Mediterranean Sea, spending thousands of hours at sea and observing them in their natural environment. My research activities, in an attempt to involve the local communities and stakeholders in the conservation process, are frequently coupled with education and public awareness campaigns. For many years the public display industry has defended the idea that display of marine mammals serves a necessary educational purpose, helping to raise awareness among the public about biology, evolution and conservation needs of this charismatic animals and ulteriorly, about the need to protect our oceans and environment. The majority of the reported 311 captive cetaceans in the EU are bottlenose dolphins (*Tursiops truncatus* and *Tursiops truncatus ponticus*). In Italy, there are four dolphinaria but only three of them currently operating. The three dolphinaria together host a population of 27 captive bottlenose dolphins.

When looking at the legal framework, we find that there is no EU specific legislation on the keeping of dolphins and whales in captivity. Legally speaking, dolphinaria should comply with Council Directive 1999/22/EC (Zoos Directive), which refers to the keeping of wild animals in zoological gardens. EU Member States should not only incorporate the Directive into national laws but can also introduce some modifications with the goal of granting higher protection for the animals. The European Commission is responsible for supervising the correct implementation of the EU Zoo Directive by Member States, by setting out minimum requirements in order to ensure that "zoos adequately fulfil their important role in the conservation of species, public education, and/or scientific research". However, the Directive does not define any of these terms, being the Competent Authority in each Member State responsible for elaborating national legislation implementing the Directive based on its own interpretation of these terms.

Italy is one of the very few EU Member States holding a specific national legislation on the keeping of dolphins in captivity. This legislation, introduced by Ministerial Decree in 2001 (Decree of the Italian Ministry of Environment n. 469/2001 about the maintenance in captivity of dolphin specimens belonging to the species *T. truncatus*), refers not only to public safety and animal health and welfare, but also to measures intended to guarantee that educational aspects are carefully considered. In addition, the Italian regulation defines the following conditions that dolphinaria MUST comply with, if dolphin *shows* (referred in the Ministerial decree as *demonstrations*) are ever staged:

A “Demonstration” can be considered as an act of showing that something exists or is true by giving proof or evidence; a practical exhibition and explanation of how something works or is performed. Instead, “show” is defined as and spectacle or display, typically an impressive one; a play or other stage performance that frequently includes singing and dancing, intended to entertain people. I personally consider the latter term (i.e., show) as a far more accurate way to describe what I observed during the preparation of this article; therefore, this will be the term used throughout the text.

- Dolphin shows must be predominantly based on the natural behaviour of the animal;
- comments must be about the biology of the species and teach the public how to observe the behaviour of the specimens;
- shows must be varied and carried out using different combinations of specimens for different sessions;
- the entire group of specimens must be guaranteed one day a week off without dolphin show;
- dolphins must be protected from excessive noise, including noises created by irregular pulses;
- the noise level must be kept as low as possible so as not to constitute a danger to the health and wellbeing of the dolphins;
- dolphins may not be fed by the public, nor must they come into physical contact with the public;
- during dolphin shows, there must be continuous surveillance to prevent visitors touching the specimens or throwing objects into the tanks;
- visitors shall not be permitted to access the service areas or the maintenance tanks.

Keeping the information above in mind I reviewed 3h 35min of video footage belonging to 9 different dolphin shows recorded in 5 dolphinarium in Italy between 2012-14 (see table below) to examine if they were effectively reflecting any dolphin’s natural behaviour, as requested by the Italian legislation and, based on my own experience, how accurate and valuable was the information provided to visitors in order to increase their awareness and interest in cetaceans and their conservation.

| Italian Dolphinarium / Zoo Parks | Dolphin shows reviewed |      |      | Number of dolphins held (March, 2015 <sup>1</sup> ) | Dolphin shows                       |
|----------------------------------|------------------------|------|------|---|-------------------------------------|
|                                  | 2012                   | 2013 | 2014 |   |                                     |
| Acquario Genova                  |                        |      |      | 10  | NO dolphin shows                    |
| Zoomarine Roma                   | X                      | X    | X    | 7   | On-going                            |
| Oltremare                        | X                      | -    | X    | 10  | On-going                            |
| Zoosafari e Fasanolandia         | X                      | X    |      |   | No dolphins from 2014               |
| Gardaland                        | X                      |      |      |   | Dolphin shows interrupted from 2013 |
| Delfinario Rimini <sup>2</sup>   | X                      |      |      |   | Closed                              |

<sup>1</sup> Info from CETA BASE website intended as a general database and resource for those interested in captive held marine mammals.

Oltremare 10 dolphins; 3 captured (in 70s-80s) in the wild and 7 born in captivity

[http://www.ceta-base.com/phinventory/ph\\_oltre.html](http://www.ceta-base.com/phinventory/ph_oltre.html)

Zoomarine Roma 7 dolphins all of them born in captivity

[http://www.ceta-base.com/phinventory/ph\\_zmit.html](http://www.ceta-base.com/phinventory/ph_zmit.html)

Aquarium Genova 10 dolphins; 4 captured (in 80s) in the wild and 6 born in captivity. 4 of those were the dolphins sequestered from Rimini and transferred to Genova in September 2013.

[http://www.ceta-base.com/phinventory/ph\\_gen.html](http://www.ceta-base.com/phinventory/ph_gen.html)

<sup>2</sup> Official Gazette, January 21 (GU General Series number 16 of 21-1-2015), released a Decree of the Ministry of the Environment on the **closure of the Rimini Dolphinarium in Rimini (15A00353), issued December 5, 2014**. This decree, issued jointly with the Ministry of Health and the Ministry of Agriculture, rejects the licensing as Zoo Park to the Rimini Dolphinarium, confirming its closure, in accordance with Legislative Decree 73/2005. Dolphins held in captivity in Rimini were sequestered and transferred to the Aquarium of Genova by the authorities, following an inspection by agents of the Italian State Forestry Brigade on 31 July 2013, which reported disturbing conditions at the Rimini Dolphinarium, including trainers administering tranquilizers and hormonal therapies to the dolphins to reduce aggression and sexual behaviours, improper housing conditions, and a lack of shade for the animals. Nevertheless, Delfinario Rimini has announced plans to reopen with shows featuring sea lions and seals (<http://www.leonimarinirimini.it>)

To evaluate the quality of the educational content of the dolphin shows I checked if the voiceover or staff presentations conducted during the show, supposed to cover basic information on the biology and conservation of the species exhibited –bottlenose dolphin–, included the following key educational messages:

| Dolphin Biology   | Dolphin Conservation   |
|---|--|
| <ul style="list-style-type: none"> <li>• Species name;</li> <li>• dolphins are mammals;</li> <li>• dolphins live in family groups or pods and in complex societies;</li> <li>• dolphins' diet (in the wild);</li> <li>• echolocation;</li> <li>• dolphin reproduction (gestation, lactation period and strong mother-calf association, parental care);</li> <li>• dolphin body parts;</li> <li>• wild dolphins habitats.</li> </ul> | <ul style="list-style-type: none"> <li>• Conservation status of the species;</li> <li>• ocean ecosystems are degraded and/or wild dolphins are under threat;</li> <li>• threats faced by dolphins (fishery bycatch, noise, pollution, climate change etc.);</li> <li>• all of us can help protect wild dolphins (don't drop litter into the sea, support marine reserves, recycle, etc.);</li> <li>• how to behave if we encounter dolphins at sea (minimum distance from boat, reduce speed, do not swim with them, prevent harassment, etc...).</li> </ul> |

Of the 9 dolphin shows reviewed from Italian dolphinarium, information on the biology and behaviour of the animals exhibited was only included in average in 10 % of show commentary. Most of the information provided to the public referred exclusively to dolphin's body parts and to identify them as mammals. All shows failed to inform the public about where the species are found in the wild and no mention was ever done to any of the dolphin conservation key points defined earlier.

In all cases shows were accompanied by very loud music, in which the animals were mostly performing a diverse repertoire of tricks and stunts consisting in the animals executing different series of leaps and aerial pirouettes. These performances were clearly looking for a spectacular or comical element, with dolphins displaying unnatural behaviours, rather than to try to reflect how dolphins behave in a natural, dynamic and rapidly changing environment. Dolphins performing in these shows only carried out conditioned behaviour which was either incomparable to any behaviour seen in the wild or highly exaggerated or altered.

For instance, in the shows of one of the dolphinarium, in an attempt to explain dolphin's echolocation, one of the trainers, after blindfolding one of the dolphins participating in the show by applying suction cups on top of its eyes, instructed the dolphin to pick-up two small circles from the bottom of the pool on command.

As everything else diligently executed by the dolphins during the show, this was a behaviour that had to be provoked/induced by the trainer. Dolphins do not echolocate as much in captivity as they would do in the wild. Captive dolphins are very likely using this sophisticated sense infrequently because, since they are confined in a relatively monotonous and predictable environment offering very high visibility (clear shallow water with good light penetration), there is no need to do so.

None of the shows ever referred to what kind of diet dolphin would have in the wild; in a captivity context food is used as a reward for carrying out the correct performance, including during shows. Natural feeding and foraging is therefore lost, as is the independence of the animals to choose their own behaviour.

Many actions performed by dolphins in shows, which were portrayed as “play” and “fun”, such as the rapid opening and closing of the mouth and the fluke strokes and tail slaps at the water surface (which were tricks recurrently used by all five dolphinarium to splash the public or to prompt them to

clap and cheer the dolphins), are actually behavioural displays that at sea would be normally associated to aggressiveness.

In the wild, these are typically moody reactions of the dolphins as a consequence of disturbance, the presence of a predator or of something else perceived as a threat.

In general, virtually nothing was taught at dolphinariums during dolphin shows about natural behaviours, ecology and cetacean conservation issues. Dolphins were exhibited performing rather clownish behaviours that showed very little, if anything at all, about the very essence of the animals that I have come to know in the wild. All dolphin shows focussed more on emotional showmanship and on emphasizing the strong bond between the dolphins and their trainers. The latter was presented rather theatrically by showing the trainers hugging and kissing the dolphins while dancing with them some sort of waltz, or what resembled a synchronized swimming choreography, at the rhythm of new-age music or a romantic ballad, depending on the dolphinarium.

Because of the nature of such performances the message that is taken home by most people attending these shows is that dolphins are some kind of entertainment objects rather than wild complex social mammals. Consequently, it is not surprising that some times people studying dolphins in the wild find themselves having to interrupt our observations and deal with recreational boats and their crews, who naively approach the dolphins at high speed, throw food at them or even dive right in the area where the dolphins are, eager to get that sort of human-dolphin bonding experience, unaware that what they are actually doing is to harass the animals causing them distress and altering their behaviour. Particular mention deserves the fact that dolphins, despite presenting an omnipresent smiley face, which by the way is not a smile at all but an anatomical illusion arising from the configuration of their jaws, if threatened, as any wild animal, can react aggressively with serious consequences for the irresponsible swimmers.

Simply put, the claim most commonly brandished by dolphinariums that their dolphin shows, considered for most visitors the peak of their trip, provide a great educational experience, is just not true. The main purpose of these performances is to display dolphins for human entertainment and amusement, rather than to convey any information on the real nature of these fascinating sea creatures, while obscuring the cruelty of the obvious fact that the “performers” are captive animals exhibited for the ultimate purpose of making money.

Commissioned by the not-for-profit organisations LAV ([www.lav.it](http://www.lav.it)) and Born Free Foundation ([www.bornfree.org.uk](http://www.bornfree.org.uk))