

Refuting the “Report on the introduction of a rescued Orcinus orca individual into the OrcaOcean group” by F. J. Almunia Portolés

Author: Dr. PhD. Lara Pozzato for the Free Morgan Foundation (FMF), 16th October 2012

Carefully reading the documentation presented to the Dutch Court by Dr. Almunia Portolés, regarding the current situation of the Orca Morgan in the facilities of Loro Parque, Tenerife, Canary Island, many issues stand out and numerous misleading and untrue details reported by Loro Parque’s Fundación Deputy Director require further analysis.

I will address all the points in order, refuting and/or questioning each of them.

The data reported in this document were collected personally by Dr. Visser for the Free Morgan Foundation at Loro Parque in June-July 2012, during 77 hours of observation over 8 days. The observation was done from the public standings and areas and during public opening times only, given W. Kiessling’s refusal to allow the Free Morgan Expert Board Members to have open access to Morgan (see Appendix 1 at the end).

INTRODUCTION

1.1 “Morgan's training level was evaluated by the head trainer of Orca Ocean, who observed a very basic behavioral repertoire, difficulties in crossing gates, and some aspects of the training method that had to be improved, especially those related to safety.”

During her time in Dolfinarium Hardervijk, Morgan has been habituated to humans against multiple expert advices and encouraged to interact in a way that was detrimental to her safety. Almunia Portolés comments in a similar vein, demonstrating that even detrimental behaviors encouraged by bad training given in the Netherlands, habituation and institutionalization can be corrected.

If this is true moving from one facility to another, I see no reason why this should not be true in the rehabilitation process that should lead to Morgan’s ultimate release. In other words, even according to marine mammal facility managers, every behavior that an orca can learn due to training can be modified, reversed and eradicated from the animal behavioral habits, as previously stated by the FMF experts.

1.2 “The enclosure has a canopy that gives shade to most of the pools' surface, offering the animals the possibility of being in the sun or the shade.”

This sentence is misleading at best. Due to the park’s configuration and the extension of the mentioned canopy, when an orca is locked in the main show pool it has no access to a sunny area and likewise, if an orca is locked in the medical pool, it has no access to shade. In the remaining two pools, shade is only available for a few hours in the late afternoon and not during the extreme exposure of midday hours. This is of great medical concern for the animals for many different reasons. The pools are very shallow compared to natural open sea therefore, even when an animal tries to evade excessive heat by spending time underwater, the water column is too limited to offer much screen against ultra violet light (Tedetti and Sempere, 2006). During training, shows, feeding, medical routine and any other training-associated activity the animals spend most of the time dwelling on the surface (Lyamin et al., 2003, Lyamin et al., 2008, Spencer et al., 1967), eliminating even the scant protection from the sun rays that the water could offer. The effects of UV light on cetacean has been scientifically documented in different studies (among others, Martinez-Levasseur et al. 2011), all concurring to establish that not only cetacean skin is very sensitive to exposure which causes burns and other skin conditions, but that animals exposed to UV light can develop irreversible damage (Jett & Ventre, 2011). On a different basis, exposure to tropical climate

such as the one present in Tenerife causes the orca skin to be subjected to mosquito bites, highly dangerous and equally damaging.

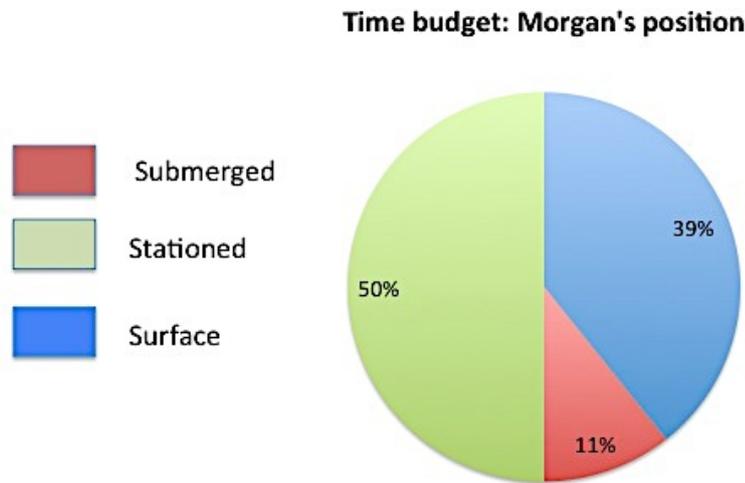


Fig. 1 Morgan's positioning in the pool: data derived from 1903 minutes of direct observation over 5 days.

Fig. 1 shows Morgan's preferred positioning in the pool. For 50% of the observed time she was stationed, almost motionless. For 11% of the stationing time she was submerged whereas for the 39% of the stationing time she was laying on the surface. This is not a natural behavior for this species, which normally travels up to 150 km per day in the wild and even sleeps swimming. This lethargic tendency has been commonly observed in captive cetaceans and is generally believed to be due to boredom, despondency and a general slowing down of the animal rhythm.

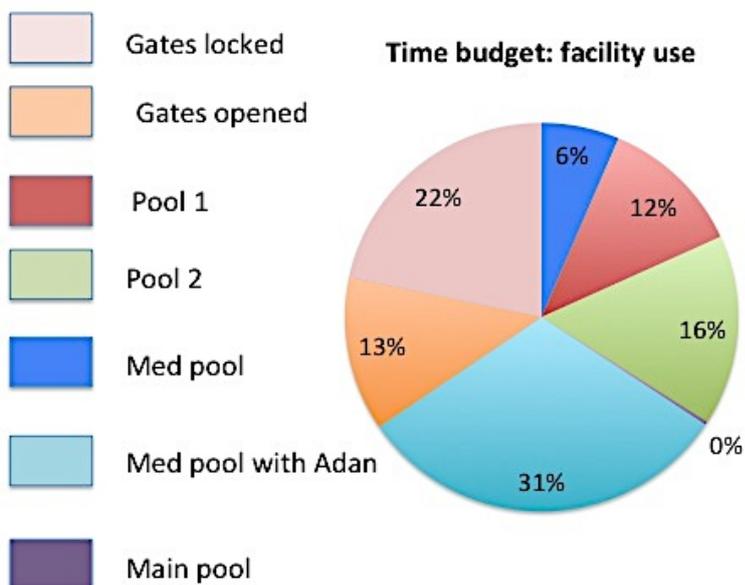


Fig. 2 Morgan's use of the Orca Ocean pools: *data derived from 1903 minutes of direct observation over 5 days.*

Fig. 2 Contrarily to what stated by Almunia Portolés, Morgan is not given free use of the Orca Ocean pools. She was kept in the Medical pool with Adan for 31% of the observation time, for 22% of which the gate was locked preventing her from exiting the pool. For 16% of the time she was kept in pool 2 and for 12% of the time in pool 1. For 6% of the time Morgan was in the medical pool alone and for less than 1% of the time she was given access to the main show pool. This clearly demonstrates how Morgan's use of the facility is strictly controlled by management necessities, arising from having to coordinate and rotate the presence of 7 animals. Moreover, when Morgan arrived at Loro Parque, Adan was still not integrated with the rest of the orca group and therefore the necessity to keep him separate cramped even further Morgan's space, forcing her to share the medical pool (where she was almost exclusively kept for months) with a calf that also was striving for attention. Now that Vicky is born and rejected, the situation can only escalate and the lack of space will undoubtedly cause further distress, altercation and frustration in all the animals.

1.2 “ Thus, the construction characteristics of the pools, and the paint used for the coating, guarantee the maximum possible hygiene and minimize the risk of animals getting hurt accidentally.”

The statement is very misleading. There are chains and nuts specifically added to the enclosure to stop the animals from doing certain things, which are specifically designed to cause pain and injury, and this is the method the facility uses to discourage animals from crossing certain areas.

ADAPTATION TO THE STAFF

2.2 “During the first days at Loro Parque Morgan carried out sessions with Loro Parque keepers in an unremarkable way, and she did not show any type of avoidance or difficulty of adapting to the new staff.”

Clearly, Morgan's environment changed during the transport and immediate transfer to Loro Parque and, given her alertness and her desire for social contact, she responded well to the training sessions upon arrival. Almunia Portolés states that her behavioral responses to trainers were unremarkable, yet he refutes himself within the same document saying that Morgan ignored the whistle from the very beginning, which led Loro Parque's staff to conclude she must be deaf. I therefore question in which way Almunia Portolés could define as unremarkable the sessions that Morgan had with her trainers.

“During the more than 77 hours I spent at Loro Parque in June/July this year, observing Morgan, I noticed that her behaviour in response to the trainers signals was inconsistent. At times she would perform the behaviour asked of her and then during others she would ignore both hand signals and bridges (whistle signals). I saw this repeatedly....”I. Visser, personal communication available on request

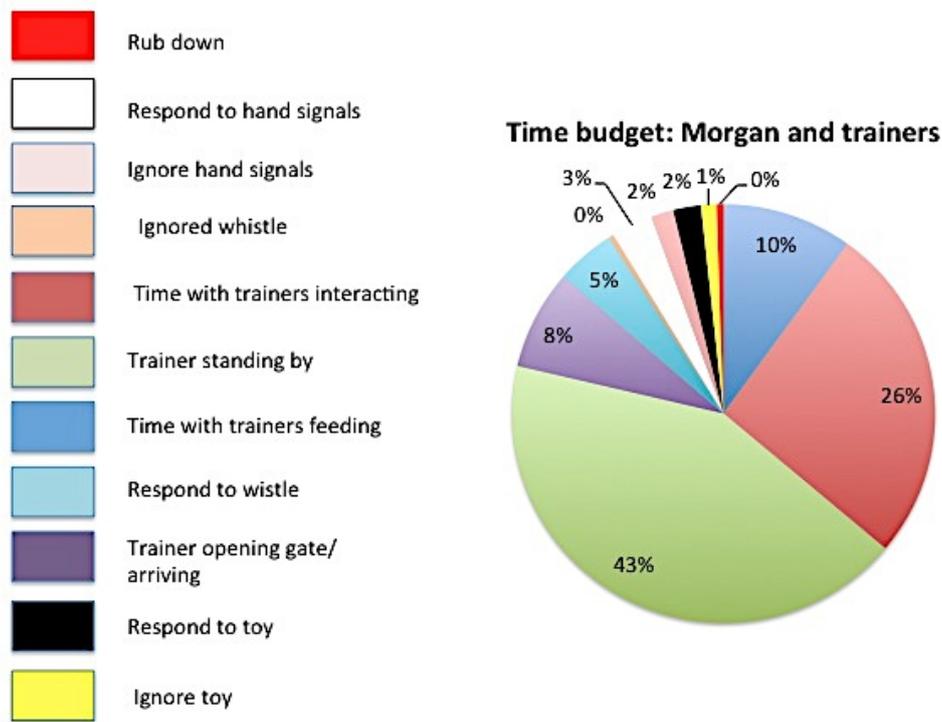


Fig. 3 Morgan's behaviors and activities during the presence of the trainers: data derived from 1903 minutes of direct observation over 5 days.

Fig. 3 supports Visser's statement. For 43% of the observation time Morgan is ignored by the trainers, whom are normally standing next to the pool-edge and often offering their back to her. The trainers were observed interacting with Morgan for 26% of the observation time and such interactions focused mainly on feeding or for 10% of trainer's movements around the pools, which Morgan followed searching for attention. Less than 1% of the time was Morgan offered one-to one contact via rubbing. This figure also shows the amount of time in which Morgan was or was not respond to the whistle and to hand signals, demonstrating that she was perfectly capable to distinguish the signals but chose not to respond to them.

The cues and responses of Orca Ocean trainers to Morgan's behavior are extremely inconsistent.

For example: They ask for behavior "A", she gives behavior "B", so instead of giving no response briefly as they should, they ask for behavior "B", which of course, she is doing/does again easily, and then reinforce her with fish. This teaches her to do what she likes rather than what is asked of her and will appear to the inexperienced trainer as being "...inconsistently responded to, or even ignored..."

ADAPTATION TO THE MANAGEMENT SYSTEM

4.1 "As expected, it was not necessary to adapt Morgan to the feeding at loro Parque, since the nutrition of cetaceans is very standardized, both the species of fish used..."

Again Almunia Portolés reports misleading information, failing to state that this "standardized nutrition" is a captivity imposed phenomenon and that, in the wild, the orca from Morgan's population are known to feed on at least 10 different species of pray. This makes it evident how the artificial conditions in which marine mammals and Morgan in particular are kept in human-made facilities very little resemble the natural habitat where these animals come from

and highlights once again the little respect for natural needs, in this case dietary needs, that orcas have, carelessly reporting as “normal” an artificially constructed and self-determined industry practice.

4.2 “From her arrival, the keepers noticed that Morgan was not responding to the bridge (whistle) signal used to inform the animals the requested behaviour has finished. Other sound signals (like slapping on the water surface -call-, ice cube dropping -targeting-, or fish dropping-enrichment-) were inconsistently responded to or even ignored, especially when Morgan was alone in one of the pools and the stimulus were behind her. As a consequence, the keepers inferred a hearing problem and developed a new visual bridge signal (join hands above trainers head) that proved to work fine in the development of her training.”

Here Almunia Portolés reports the concern manifested from the very beginning regarding Morgan’s auditory capacities. It is worth noticing that before the transport to Loro Parque, some staff members of the park, among which the Orca Ocean head trainer, spent considerable time in the Netherlands with Morgan and were able to assess her behavioral repertoire and training level. It would be only logic that the same staff members that made the trip to Dolfinarium Hardervijk to assess Morgan’s conditions, transported her to Loro Parque and then start working with the animal in the new facility should have noticed the same issues also in the tank in Hardervijk. Interestingly though, during the previous court hearings as well as during the meetings that the interested parties had with the Dutch Ministry, Morgan was always given a “clean bill of health”. At the direct question posed by myself to the veterinary of Hardervijk Mr. van Elk “does Morgan have any pathology or disease or sickness or condition of any kind?” the answer was that Morgan was completely healthy.

“When Morgan did have the trainers attention (during a brief feeding or training session) she would attempt to keep the trainers involved with her, through manipulating their behaviour (even if they were trying to train her, she was training them!). For instance if a trainer signalled for Morgan to go through a gate (called 'gating'), she would wait until the trainer gave the signal, and she would purposely ignore it. Then the trainer would give the signal the second time. This manipulation by Morgan may have only extended the interaction for less than 30 seconds, but in the whole scheme of a 3 minute interaction that is clearly important for Morgan.”

“I’ve concluded that Morgan is ignoring the trainers’ signals as a way for her to not only manipulate them, to show her frustration and stress but to also show that she still has a flexible mind. Clearly that bodes well for her rehabilitation and her release back into the wild.” I. Visser, personal communication available on request

4.2 “She has been also present in presentations (pool A) to avoid routine arrangements and frustration.”

This statement made by Almunia Portolés clearly hints at a violation of international laws on cetaceans’ captivity.

In a recent paper in press on Transnational Environmental Law, Trouwborst et al. report that “Captured specimens of cetaceans (Cetacea) may be retained temporarily to enable recovery, with the purpose of subsequent release. If release is not possible, such animals may be retained permanently for the purpose of conducting research which is relevant within the framework of obligations imposed by the EU Habitats Directive, the Bern Convention and ASCOBANS” no where mentioning that it is possible to retain them for commercial purposes. The same authors also state that “the EU transportation permit to move Morgan to Tenerife was issued *exclusively for research purposes*, that the ruling of the Dutch Court on 2011

confirmed that scientific research is subordinate to other interests at Loro Parque” and that anyway under the ASCOBANS “the conduct of scientific research does not seem to prove an obvious justification for keeping an animal in permanent captivity”.

Clearly, using Morgan for public display to paying visitors creates a considerable commercial value of the animal and having Morgan take part to the so called “presentations”, which are also commonly known as “shows”, surely increased the number of tickets sold by the park.

PROCESS OF INTEGRATION IN THE SOCIAL GROUP

5.1 “When still in Harderwijk, Morgan had a very marked tendency to vocalize on the surface, perhaps because for one year and a half her only contact was with the trainers.”
 “.....her aerial vocal behavior hasn't been extinguished, and she is still the most vocal at the surface (compared with the rest of the animals), especially when trying to get the keeper's attention....”

By Almunia Portolés admission, bad training techniques were instigated at Dolfinarium Harderwijk, where no attempts were made to dissuade Morgan from searching social interaction and satisfaction by the trainers, instead by for examples the dolphins that were kept next door and were in visual and acoustic contact with Morgan. Such bad practice continues at Loro Parque, as Almunia Portolés admits here by stating that Morgan’s aerial vocalizations continue and as can clearly be seen and heard each time Morgan attempts to gain the attention of trainers.

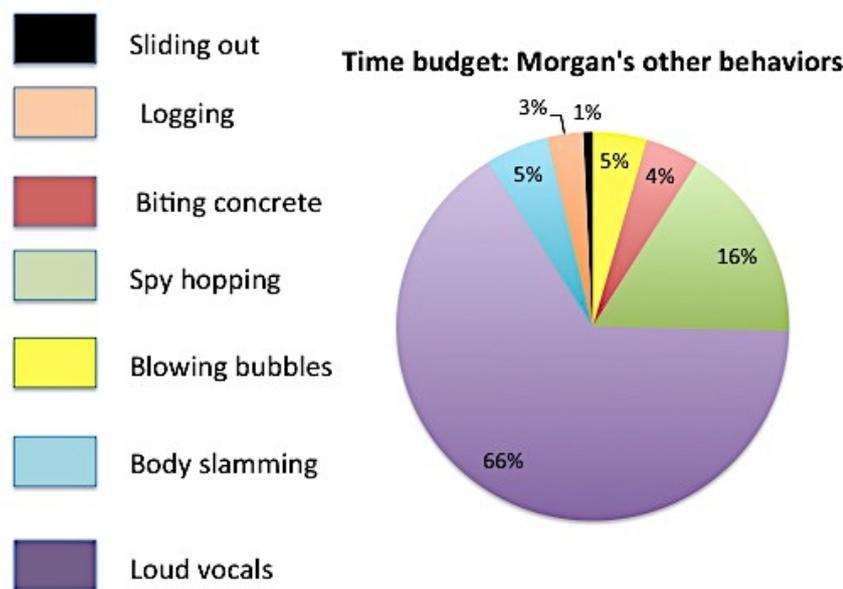


Fig. 4 Morgan’s array of behaviors: data derived from 1903 minutes of direct observation over 5 days.

Fig. 4 clearly confirms what reported by Almunia Portolés. Morgan vocalizes loudly for 66% of the observation time and almost exclusively on the surface. This is commonly interpreted as a stress indicator, with which the animal manifests its malcontent. It cannot be seen as communication attempts towards the other animals because such attempts would be then made underwater, not in the air; therefore such “cries” are clearly aimed at the trainers, either to catch their attention or to simply let them know that she is not satisfied. Also the other more commonly observed behaviors can be used as frustration indicators: spy hopping is normally done by wild orcas to have an above-water look at their surroundings; once again Morgan is searching for humans. Body slamming, manifested for 5% of the observation time, is also clearly a way to attract attention as is blowing bubbles (5% of the time). Biting the concrete is generally interpreted as a stereotypic behavior, performed by captive cetaceans

when kept in tanks and pools and many examples of such behavior are reported in the literature (one for all, Jett and Ventre 2011) with severe consequences for the animal's teeth, gums and rostrum that get seriously damaged by this activity.

“Morgan was always very eager to attract the trainers' attention and she would constantly try to involve them in interacting with her. In the 8 days that I watched her with the trainers, she never once succeeded in engaging them to interact and any interactions were strictly controlled by the trainers. The interactions that they did give Morgan were abysmally limited (with a typical interaction (including feeding) never lasting longer than five minutes and more often limited to less than three minutes).” I. Visser, personal communication available on request

5.2 “Every introduction event was observed by the keepers, who intervened to separate the animals when they noticed any type of social displacement, agonistic reaction or aggression.”

Although the trainers may have "intervened to separate the animals when they noticed any type of social displacement, agonistic reaction or aggression " during the initial process of introduction, during the 77 hours of observation by Dr. Vsser 91 altercations, attacks and aggressions were observed, with more than half of these being photographed or recorded. At no stage did the trainers ever intervene in any way, despite them being present.

“The trainers do not seem to view these behaviours as a positive indication of her intelligence and boredom, but rather they choose to ignore her and allow her to be attacked by the other orca, even when they are within meters of her and her attackers.”

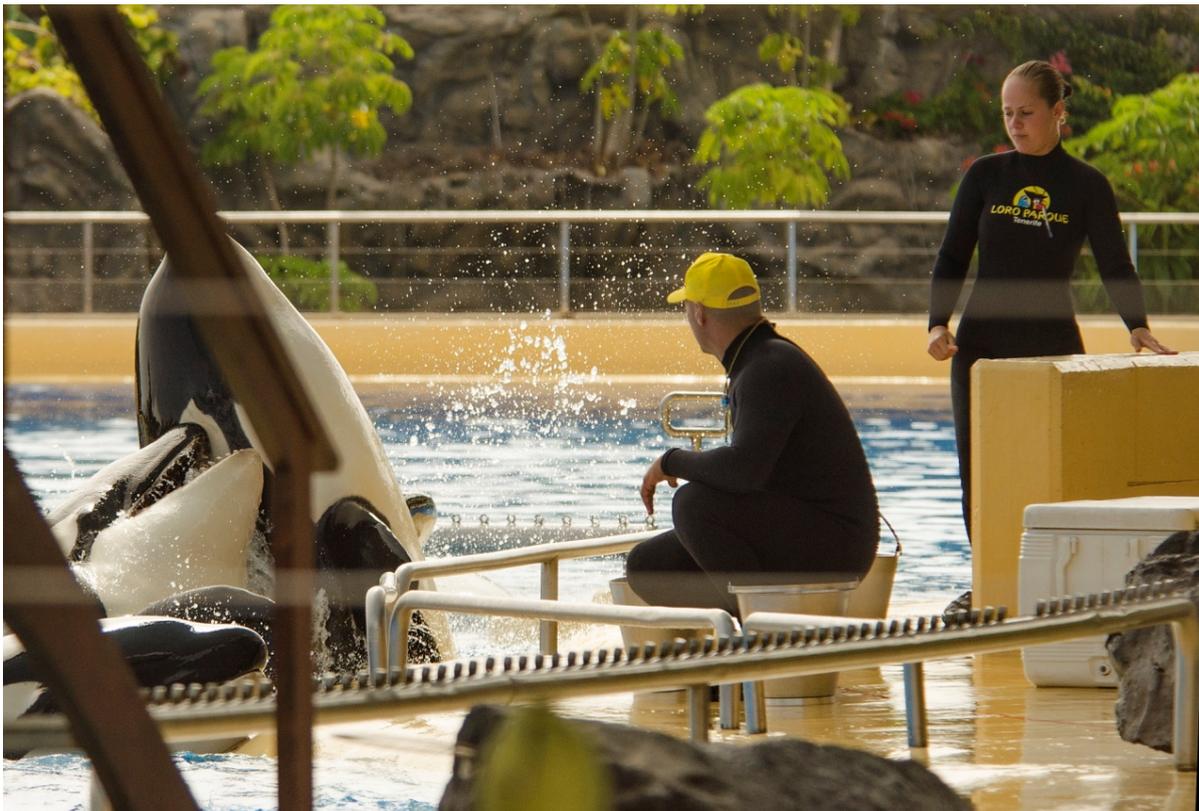


Fig. 5 Morgan being bitten with trainer standing without intervening. June 29th 2012 © Dr. Ingrid N. Visser -Free Morgan Foundation 2012

5.2 “During the individual meetings no cases of social displacement, agonistic reaction or aggression were observed from any individual.”

This statement is inexact and the definitive tone with which is written suggests that the author is deliberately ignoring reality of things. Not only have we witnessed in more occasions altercations when only 1 other orca was kept with Morgan, but even though some of these may have been instigated by her, in many Morgan was the victim. In all instances, when Morgan was observed with two or more orca in the same pool, she became a victim and was repeatedly attacked.

5.2 “(Kohana and Skyla), and they showed a very good relationship, without reactions of displacement or agonistic behaviours. From the second week introductions began with other pairs of animals.”

As already reported above, what stated here is not true. We have footage of Skyla repeatedly ramming Morgan to the point of pushing her out of the water and on the internet there is plenty of evidence of both Skyla and Kohana chasing, biting and ramming Morgan. Among the footage that can be found on the web, there is one particular video where such attacks are well documented, with the voice of a Loro Parque tour guide in the background dismissing such behavior as “playful interaction” when answering concerned questions regarding the nature of such behaviors made by paying public
<http://www.youtube.com/watch?v=pGJzKhOIC5k>.

5.2 “When three or more individuals were involved in the introduction events, the social displacements and adjustments appeared, and as a consequence several keepers were carefully supervising every single introduction event.”

Such inexact and misleading statements have been already disproven above.

5.2 “In March the integration process was considered accomplished, as Morgan was able to spent the whole night regularly in any pool with any animal.”

I have great difficulties in considering accomplished an introduction that sees the introduced animal, Morgan, being bullied, bitten, chased, rammed.

5.2 “From the very beginning she showed a very peculiar social behavior, with strong and vigorous playful interactions with any other animal in spite of the hierarchy.” “This particular behavior (pushing down the other animals, even trying to bite them in the genital area) sometimes triggers social displacements or agonistic reactions by the other animals. As a consequence Morgan has scars and rack marks produced by the rest of the group, but none of them has ever need veterinary attention. During the socialization process it is expected to experience social readjustments, displacements and agonistic reactions as the individuals feel the need to impose their positions in the hierarchy.”

Not only Almunia Portolés contradicts himself here, stating that there were displacements and agonistic behaviors by the other animals at Orca Oceans, but blames it on Morgan. This is not only, again, misleading but deeply duplicitous. These statements clearly admit aggression and tension between the animals but depict Morgan as the “bad girl”. Such behaviors described here are not observed in the wild and it is logical to think that the dysfunction of the social grouping within the orca group in Loro Parque and Morgan’s frustration at being continuously attacked are manifesting themselves in her attempts to retaliate.

Morgan’s body is covered in bite marks and scars but Almunia Portolés considers them not needy of medical attention. I dissent from this statement. It has been proven by a scientific study how an infection due to the bacteria *Clostridium perfringens*, that entered the animal

body via rake and bite marks lesions, caused the death of a captive Atlantic bottlenose dolphin (Buck et al., 1987). The same study reports how “Appropriate management of unimmunized captive marine mammals with cutaneous lesions [rake marks] should include isolation.”

5.2 “As an example, the graph of the night time configurations for Morgan during the month of October is included, showing that she was not alone any night, but in pairs or groups of three, four, five or all the animals together.”

According to the exemplificative pie-chart presented by Almunia Portolés, for a total of 56% of the night time Morgan is kept with other animals. By his own admission, when Morgan is kept with more than another animal aggression happens and our own observation proves that even with only one single other animal there are altercations. Given the nature of these behaviors and the predominant fate of Morgan as victim of such behaviors, we can conclude that more than half of the nights that Morgan spends in Loro Parque she is subjected to violent behavior, attacks and being bullied. Loro Parque’s staff is consciously enclosing Morgan in a pool with a group, knowing that aggression events are common during unsupervised night times, which once again contradicts the previous statement that “several keepers were carefully supervising every single introduction event”.

It is also interesting to notice that none of the pictures presented by Almunia Portolés have an appropriate caption. In many of the underwater photos in particular, it is unclear and not indicated which orca is Morgan, making these photos irrelevant to the report. The only picture with a caption reports “Voluntary blood extraction of an orca at Loro Parque”. Not only is the animal involved not Morgan (making this picture also irrelevant to the document) but again the sentence is misleading, in that the behavior depicted is voluntary presentation the fluke, not of blood and even the “voluntary” can be challenged, in that it is a trained behavior and not something an orca would do voluntarily.

INTEGRATION IN THE SCIENTIFIC RESEARCH

6.1

This whole paragraph presents Loro Parque’s scientific activity. By their own admission, the park is massively involved in conservation projects of bird species (as reported in the court case evidence submitted by Loro Parque in 2011) which therefore have no relevance to Morgan or orca in general.

“Two out of the five marine projects had *ex situ* activities related with *Orcinus orca*.”

The projects presented here are of no conservational values for wild orca populations and certainly not for the Norwegian orca population. Again this is conflicting with what found in international law (Trouwborst et al. 2012) which states that cetaceans can only be used for research that is relevant to the conservation of the species.

Moreover, in whole section 6 Almunia Portolés repeats and reiterates the objectives of mainly 2 studies, presented first as ongoing projects and then as research requests. These same two studies had already been presented twice in the court case documentation. The Free Morgan Foundation already discussed their limited validity, their disputable results of which none published since 2006 when they were first presented and the absolute non-necessity of using Morgan to conduct such research. Now 6 captive born orcas are at researchers’ hand in Loro Parque, two of which young calves that can provide all the information needed to study dialect development. It also results perplexing that no researchers’ names are presented in

section 6.3, limiting the identification to “The last request to perform scientific research with Morgan has come from the University of St. Andrews (Scotland), from the research team that made the comparison of Morgan's dialect with the records of pod dialects from the three major orca populations in the North Atlantic.” This probably is due to the necessity to repeat the only name already presented in pag.4 “Dr. Filipa Samarra” and therefore admit the repetition of the same research project.

Irrespectively of what already reported, few things need attention regarding the presented research. Most of it is bioacoustic research for which there is an ongoing long tradition both in captivity and in the wild. Numerous scientific papers have been already published on the topic, regarding acoustic range, capabilities, sensitivity, dialect transmission, learning and development, acoustic identification and vocalization repertoires as well as comparison among cetacean species (an example being Deecke et al. 2000). This confirms how the proposed research conducted at Loro Parque offers nothing new or ground breaking to justify Morgan's captivity.

Moreover by Almunia Portolés own admission, any acoustic research to be valid needs healthy animals that can hear properly.

If, and I am absolutely not convinced of this, Morgan is deaf, than such research has no scientific value because fundamentally biased.

Again as Almunia Portolés states, Morgan's hearing capabilities need to be thoroughly tested before using her for research. Morgan has been in Loro Parque since November 2011 and according to this report the facility immediately noted her lack of response to acoustic clues and suspected her to be deaf. Therefore, not only no scientific research should have been started before Morgan's testing but such testing should have been conducted immediately.

Almunia Portolés again reports misleading information saying that “At the beginning of 2012 a team of experts in measuring hearing capacity in wild rescued cetaceans was contacted, and they suggested evoked potential as the ideal methodology to test Morgan”. This is inexact information, insofar such kind of studies have been conducted by many different authors and on different cetacean species since 1971, in particular the first on Orcas by Hall et al. (1972) and Szymanski (1998). This offers no excuse to such a late intervention and offers no justification to Loro Parque's claim that Morgan's captivity is needed for research.

Evoked potential auditory testing is a reliable, non invasive technique that requires very little animal training (the animal is required to remain underwater for only 2 minutes at the time) and that can be performed in short time periods, as reported by Cook (2006), Szymansky et al. (1998 specific on orca), Ridgway et al. (1996, 2001), Brill and Moore (2001) Montie et al. (2011) Houser (2006), Finneran et al. (2009). These authors also validate the method comparing its results with other techniques, among which the traditionally used behavioral response method.

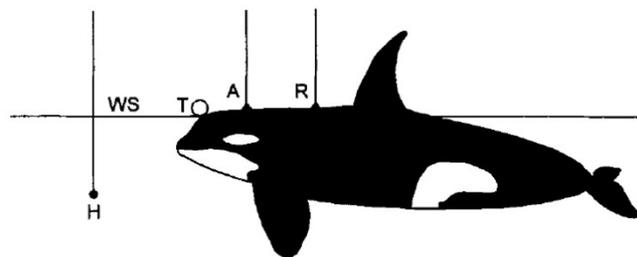


Figure 1. Whale's position during recording session. H: hydrophone, WS: water surface, T: target, A: active electrode, R: reference electrode.

Fig. 6 Picture taken from Szymansky et al. 1999

This also disputes Almunia Portolés when he states that “The auditory capacity of the species comes from a study of 40 and 20 years ago”.

Almunia Portolés was personally given by Dr. Visser the contact information of Dr. Ridgway along with scientific papers written on the topic by him and his coauthors in June 2012 (e-mail exchange available upon request). To date, we are not aware of any contact attempt made by Loro Parque to Dr. Ridgway and Morgan has not been tested. Moreover, Almunia Portolés agreed with Dr. Visser on June 2012 on the necessity of such test and on the importance of it being conducted by impartial external professionals followed by a panel of experts to ensure quality of the data and avoid party manipulation of the results. Loro Parque started training Morgan at least 10 months ago for such tests, as proven by this image



Fig. 7 Morgan's fitted with suction cups. (note yellow, white and green disks on Morgan's head) April 27th 2012 © Dr. Ingrid N. Visser -Free Morgan Foundation 2012

where Morgan is fitted with suction cups, devices commonly used in evoked potential studies to allocate electrodes on the animal skin to be able to record stimulus response. According to the literature presented here, the park had all the time to perform the test quickly and without long training required.

Should Morgan's deafness be confirmed, the causes of such deficit can be only 4:

1. Congenital anomaly which leads to deaf born animal
2. Old age natural hearing loss (Ridgway and Carder, 1997, Brill and Moore 2001)
3. Drug treatment which can be ototoxic (Montie et al. 2011, Ridgway and Carter, 1997)
4. High noise levels and or traumas that may damage the auditory system

Causes number 1 and 2 can be dismissed for Morgan, given Hardervijk's veterinarian clean bill of health and her young age. Cause number 3 can be an option but again only after some permanence at Loro Parque, given what stated by the veterinarian. Cause number 4 is also to be considered possible. Much past and ongoing research has proven that orca's hearing is impaired and damaged by high levels of noise such as happens in the wild in heavily trafficked areas, where boat noise is constantly loud (as example, Holt et al. 2009, 2011, 2012, Miller et al. 2006, Supin et al. 2006, Erbe 2002, Morton and Symonds 2002). After

permanence of Morgan in Loro Parque, where high volume music is played during all opening hours, in contrast to no music being played at Hardervijk, it is possible that Morgan's hearing could have been damaged.

According to this analysis, should Morgan be totally or partially deaf it would be an acquired damage, cause by careless and unprofessional handing of the animal at Loro Parque.

Unless totally deaf, her hearing loss is presumably limited to high frequencies as reported by the literature previously cited. This confirms that low frequency sounds such as slapping on water surface and splashes are commonly always heard by partially deaf cetaceans. This once again confirms the Free Morgan Expert Board theory that Morgan is voluntarily ignoring many of the signals received acoustically by the trainers (whistle, slapping and so on) while preferring visual signals that nevertheless are ignored as well, as reported by Dr. Visser in her report presented together with this one. Most probably ignorance of the whistle comes from over habituation and desensitization occurred during her period at Harderwijk where Dr. Visser, Terry Hardie and myself witnessed in many occasion inappropriate of this device.

It has been reported though that even a discovered totally deaf bottlenose dolphin named SIB captured in the Mississippi Sound in 1984 was found robust and healthy, therefore able to survive in the wild despite her deficit and maintain good nutrition not only by using senses other than audition (normally considered as main tool to hunt prays via echolocation), but by observing other dolphins (Ridgway and Carter, 1997). This is a very good example of how in cetaceans as in humans when one of the senses is impaired the others take over and behavioral adaptation of the individual allows for a normal life. Should therefore Morgan be even totally deaf, her released should not be considered hampered and even less her transfer to a more natural enclosure such a sea pen should her release be refused.

CONCLUSIONS

The evidence reported in this document, in conjunction with the other material presented together with hallows me to draw numerous conclusions regarding Morgan's conditions at Loro Parque and the facility's staff and environment.

Regrettably Loro Parque's staff seems not to be particularly trained in handling orca's necessities and alarmingly little knowledgeable on training methods and animal responses. Moreover, the staff seems to have adopted a careless approach regarding the animals' safety and seems to be blind to eth necessity of keeping a close look on the animals' interactions. A proper, experienced trainer, and proper, independent, scientific testing should be done to determine her hearing ability.

As the training staff at Orca Ocean lacks significant experience (they have at least 1 trainer there in the last year who has no prior experience with orca), their determination of what qualifies as stress and what does not is doubtful, calling into question all of their conclusions on what the animals find acceptable and on their judgment on Morgan's integration and well as stress responses from all animals.

For example they state Morgan's first interaction with Adan was very positive - Again, this relies on experience from trainers as to what constitutes "positive" they don't say what actually happened.

Loro Parque's research projects and programs seem to be highly involved into birds' conservation and other appreciable activities, but little is done for orca conservation. In particular for their own admission, they only have 2 research requests for Morgan's utilization in scientific projects, one of which for genetic material, which they state they already had

from before and Morgan's genetic material has already been analyzed when she was still in the Netherlands.

In 2012, Loro Parque has 4 projects for orca. Almunia Portolés only talks about 3 of them, and only 1 of them "needs" Morgan. Also, since 2 of them are continuations from previous projects, we would like to see the previous projects published results. These are lacking, therefore we question how valuable is the research done at Loro Parque to the scientific community?

Such research seems to only benefit the captivity industry, and at the very least, the validity of how it applies to wild populations is severely tainted by being done in an artificial environment.

Almunia Portolés mention their acoustic recording system.

He doesn't make mention of video recording equipment that we saw (which they stated they had in previous court documents during the first rounds). The amount of video they talked about recording in the previously submitted material was extremely high, and was extremely doubtful they would house the hardware required to do it. This calls into question their credibility on what they say they will do, versus what they actually do.

Among other things already discussed, Almunia Portolés states "At some point during the experiment Morgan focused on the direction of the underwater speaker, showing an apparent interest...", which proves she is not deaf and the lack of testing and research proposed hinders at his poor belief of such a claim.

APPENDIX 1

W. Kiessling letter of refusal to the Free Morgan Foundation-Expert Board researchers to have open access to Morgan



WOLFGANG KIESSLING
PRESIDENTE

March 5, 2012

Dear members of the Free Morgan Foundation,

Thank you for your letter and interest in the well-being of Morgan.

As you are well aware, Morgan was transferred to Loro Parque after the decision by Dutch and Spanish authorities, which was granted by a Dutch judge.

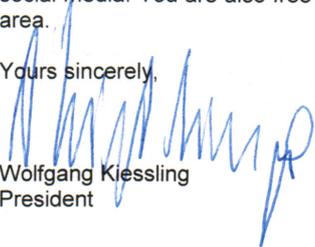
The integration process for Morgan has been successful. She is well adjusted, healthy and has assimilated with the other killer whales at Loro Parque. Research projects involving her are now underway.

The integration process of Morgan is being supervised by the local CITES authorities and the Environmental Department of the Regional Government. The regional government of the Canary Islands regularly inspects our facilities under the Spanish zoo law (31/2003, transposed from the EU Zoo Directive) and we regularly report on Morgan's integration process. If you have any questions on Morgan, please address them to the competent authorities.

Loro Parque has always been willing to cooperate with any animal welfare organization, and we are proud to be transparent about our animal management standards. Nevertheless, we do not see the legitimacy of your organization and which is the added value of your experts observing Morgan. In fact, we can't trust your good intentions as you intentionally misused and manipulated information to discredit our organization and our animal management standards in the past. Last year your scientific advisor refused our invitation to have access to the holding area of the orcas and, instead of making judgments based on scientific data, she just tried to discredit our organization in Court with manipulated information. As a consequence, we cannot accept any monitoring of Morgan involving your organization.

We invite you to continue to follow Morgan's progress as through our webpage and social media. You are also free to visit Loro Parque as you already did, from the public area.

Yours sincerely,


Wolfgang Kiessling
President



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Cabildo de Tenerife



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Ministerio de Industria,
Turismo y Comercio, España



Medalla de Oro
de la Ciudad de
El Puerto de la Cruz 1997



Premio Príncipe Felipe
"Excelencia Empresarial 2000"
Ministerio de Industria,
Turismo y Comercio, España



Medalla de Oro
"Importancia del
Turismo 2000"
Gobierno de Canarias



Medalla de Oro
"Mérito Turístico 2009"
Ministerio de Industria,
Turismo y Comercio, España



Medalla de Oro
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