# Preliminary report on 'Martinha' and 'Barra'; Two 'rescued' short-beaked common dolphins (*Delphinus delphis*) held in captivity at CRAM-Q in Quiaios, Portugal

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Martinha (front) and Barra (background) in the pool at CRAM-Q, 24 March 2014 Photo © Dr Ingrid N. Visser

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### **Executive Summary**

'Martinha' and 'Barra' are two female common dolphins (*Delphinus delphis*) currently held in captivity at "*Centro de Reabilitação de Animais Marinhos de Quiaios*" (Quiaios Rehabilitation Center for Marine Animals) (CRAM-Q), located in the town of Quiaios, 200 km, north of Lisbon, Portugal. Both dolphins were rescued and have been partially rehabilitated, but are being held in a small tank, with no attempt to return them to their natural habitat. Martinha, rescued as a juvenile, in 2007, has spent (at the time of writing), over six years at CRAM-Q, whereas Barra, rescued as an adult in 2012, has been held for approximately one and a half years.

On the 23rd of March 2014, the authors spent approximately 1.5 hours time viewing the dolphins. Any further observations were not possible due to restrictions imposed by the staff of CRAM-Q. Therefore an extensive and comprehensive behavioural and physical evaluation of these two dolphins was not possible. However, we could identify a number of key issues, such as the extremely small tank in which they are being held, the lack of species-specific environmental enrichment and the apparent limited rehabilitation efforts being made towards any release. It is clear that no plan for rehabilitation with release as a goal, is being carried out and this was confirmed by CRAM-Q staff.

During our observations, the dolphins presented stereotypical swimming patterns. From the comments we were given and the data we have collated, these two dolphins are apparently receiving inadequate attention from their care-takers. The staff informed us that both dolphins are not trained for basic husbandry which results in the dolphins having to endure veterinary procedures under very stressful conditions which could easily be avoided through proper training of the staff and dolphins.

Of extreme concern is the grossly inadequate size of the tank (approximately 7x13 surface area and <2 m deep). Therefore, the dolphins have no ability to exercise appropriately, nor express their natural behaviours, both of which are fundamental requirements and guiding principles for animal care and good welfare.

### **Executive Recommendations**

1. CRAM-Q should be contacted and the welfare of the dolphins discussed.

2. Both dolphins should be immediately removed from the CRAM-Q facility as their tank does not meet the basic needs of any dolphin species. Ideally the dolphins should be held in a sea pen for rehabilitation in preparation of (4).

3. The behavioural and physical status of both dolphins should be evaluated by independent and experienced cetacean experts and an appropriate rehabilitation programme should be designed and urgently instigated, following expert recommendation.

4. Both dolphins should, if evaluated as suitable, be released into the wild with conspecifics, upon completion of the rehabilitation programme.

#### 1. Introduction

It came to the attention of the authors that two short-beaked common dolphins (*Delphinus delphis*) were rescued from the wild (one from a stranding and the other from a net entanglement) and had been held for extremely prolonged periods by "*Centro de Reabilitação de Animais Marinhos de Quiaios*" (CRAM-Q). This is a branch of the non-profit Portuguese organisation *Sociedade Portuguesa da Vida Selvagem* (SPVS) and is the northernmost rescue network for marine wildlife in mainland Portugal. SPVS built this center in 2006, which is currently one of the three that can legally rescue and can house marine wildlife in Portugal.

Common dolphins are a wide-spread species found off the coast of mainland Portugal (Sequeira et al., 1997). They are considered a smaller dolphin species, reaching approximately 2.3-2.6 m in length and weighing up to 135 kg (Jefferson et al., 2003).

Gillnet fisheries by-catch are the main threat for cetaceans in Portuguese waters (Sequeira et al., 1997; STECF, 2002), although in 77.2% of stranding, cause of death could not be determined (Sousa, 2011).

Cetacean rehabilitation can be extremely costly, yet there have been numerous cases (more than 100 individuals of 11 species) where cetaceans have been rehabilitated and released back into the ocean (Visser, unpublished data). Five of these have been common dolphins.

#### 2. Methods

### 2.1. Site visit

On 23 March 2014, the authors secured a visit to CRAM-Q's installations to observe the dolphins, to evaluate the facilities and conditions first-hand and to obtain photographs and video footage.

#### 2.2. Interviews

The staff member at CRAM-Q who escorted the authors during their visit was questioned for details regarding both dolphins. Although the staff member was able to provide information, she indicated that she did not work directly with the dolphins. Questions have also been directed to additional staff and non-staff by email.

### 2.3. Online Research

Online research was conducted via social media sites (such as Facebook and YouTube) as well as general searches on the web. Photographs, video and information details were found and downloaded as archival material. Following the site visit, the approximate size of the tank at CRAM-Q was measured on 'Google Earth' (https://earth.google.com/).

- 3. Results
- 3.1. Site visit Evaluation of conditions

3.1.1. The tank

The tank holding the two common dolphins is approximately 7x13 m (Figure 1), as measured on Google Earth. The staff member conducting the tour did not provide the dimensions of the tank but the authors were informed that the tank slopes from 'waist deep' at the sides, to a maximum of 2m deep, in the centre. A video screen-grab from online research shows two adult men standing at the edge of the tank, in waist-deep water (Figure 2).

Figure 1. The woefully inadequate tank at CRAM-Q. The tank (as measured on Google Earth) is approximately 7x13m. It is less than 2m deep at the centre and slopes upwards from the middle towards the sides. Common dolphins reach sizes of 2.7 m, meaning that at no location in this tank could an adult common dolphin hang vertically in the water. This is the only tank that the dolphins have access to as there is no adjoining tank. (Photo Visser, 23 March 2014).



Figure 2. Two adult men stand in waist-deep water at the edge of the tank at CRAM-Q, indicating the extremely shallow depth of the tank. This shallow water apparently extends around the circumference of the tank. The photo shows Martinha being moved into this 'bigger' tank for the first time. (Photo taken from a YouTube video posted 17 August 2008, by Salvador Mascarenhas).



The tank for Martinha and Barra can be shaded by retractable wind-break fabric (shown retracted in Figure 1), however this is at the discretion of the staff and the dolphins must remain exposed to the sun if the shade is not extended over their tank.

The pumps/filters (partially visible in Figure 3) could be constantly heard from the authors' location, approximately 20m away. As these pumps/filters were closer to the dolphins tank than they were to the observers, it is most likely that this noise is not only audible to the dolphins but would be exacerbated by vibrations through the ground due to their extremely close proximity to the tank.

Figure 3. Between the in-ground tank of Martinha and Barra and the pumps/filters (light blue drum-like device at the middle rear of the image) an above-ground tank (blue) was visible. It was unclear what this tank is for but it may be a "medical tank". If it is indeed a medical tank, then the dolphins would have to be removed physically from the in-ground tank and manually lifted into the blue tank. Such a procedure is no doubt extremely stressful for the animals, especially given they have not been trained for captures or other husbandry procedures (Photo Visser 23 March 2014).



#### 3.1.2. Water conditions

It is apparent that the pumps and/or filters are not adequate and/or that the water quality is not controlled, as the water has been green since at least April 2012 (Figure 4).

Figure 4. From the photographs and footage we have, only images from 17 August 2008, show clear water. Most recent photographs show a green colour, indicative of algae and/or poor filtration. (Photos (in chronological order) by: Salvador Mascarenhas via YouTube, Corcodel, CRAM-Q Facebook profile Timeline, Visser).



#### 3.1.3. Behavioural evaluation

The authors, despite only observing the dolphins for approximately 1.5 hours were able to ascertain that behaviourally both dolphins exhibited stereotypies, including rhythmic swimming patterns. They swam around the pool perimeter and in figure "8" patterns. Both animals became quite active when the authors arrived. Martinha (rescued in 2007) appeared more interested in the authors' presence than Barra (rescued in 2012). Neither animal was observed conducting begging behaviours, but as the authors were prevented from approaching the side of the tank (e.g., see Figure 5), begging behaviour would be unlikely to be motivated / stimulated by our presence.

Although only observed for a short period of time, the activity levels of both dolphins decreased over this brief period. Conversely, logging behaviours became more frequent and the bouts of 'logging' (inactively lying at the surface) increased. Barra was observed to side-slap once and the staff member informed the authors that this was because Barra was attempting to draw the attention of Martinha away from a focus on ourselves. However, the authors do not agree with this interpretation of Barra's behaviour and would not place any significance on the behaviour other than to state that such behaviour illustrates that this dolphin is still able to exhibit a modified aerial-orientated behaviour.



Figure 5. The senior author, observing and filming the dolphins at CRAM-Q. Observations were strictly limited by the CRAM-Q staff member, in both duration (less than 1.5 hrs) and proximity to the tank (authors were not permitted to approach closer than 20m to the tank, as above). The dolphins were acutely aware of the 'new' observers and would often swim whilst attempting to look out of the tank. (Photo Visser 23 March 2014).

### 3.1.4. Diet

The authors were not permitted to view the dolphins being fed, apparently as a result of staff requests to not be observed during this process. The authors were informed that the dolphins had been fed 'live fish' at 'some point' of their 'rehabilitation' but they also stated that this wasn't the case in March 2014. From questioning the staff member conducting the tour and through online research, it appears that these two dolphins are

fed a diet which consisting primarily, if not totally, of fish (in contrast to a wider prey base that free-ranging common dolphins from Portuguese waters would feed on).

## 3.1.5. Environmental enrichment

The authors were told that 'toys' (a ball, a hoop, a stick, a flipper) are placed the pool for 'mental stimulation'. The authors were also told that the dolphins interact between themselves most of the time and therefore do not require interactions with people. The authors disagree; at this stage of their 'rehabilitation' and because of the extent of time they have been kept in the pool (not to mention the extremely small tank size), the staff should be making greater efforts in providing environmental enrichment. Furthermore, the 'toys' currently provided are not 'species-specific'.



Figure 6. A ball and hoop in the tank with Martinha, presumably for attempts at environmental enrichment. Martinha was alone at the time (April 2012) as Barra was not yet at the centre Note, the water is still green. (Photo Corcodel 4 April 2012).

### 3.1.6. Barra's abortion

The authors were informed by the CRAM-Q staff member that Barra aborted shortly after reaching the centre. It was not known what month of her gestation she was in, nor what provoked the abortion, although stress of entanglement, rescue and transport may have induced it. However, without the medical records, medication or an acquired pathogen cannot be eliminated as the cause. It isn't known if CRAM-Q staff conducted an obstetric ultrasound on Barra before implementing any treatment, or if a necropsy was performed on the foetus.

#### 3.2. Interviews

The authors formulated a list of questions prior to the CRAM-Q visit, to be raised casually during the duration of the guided tour. The answers were later compiled and offer an insight into a version of events as presented to us by CRAM-Q.

The CRAM-Q staff member (hereafter referred to as the 'Guide') indicated that with respect to the CRAM-Q 'rehabilitation attempts', live fish had been presented to the dolphins at certain periods (but that they were not being given live fish in March 2014).

• CRAM-Q has not yet identified a seapen location.

• The Guide stated that CRAM-Q would not transfer the dolphins to a sea pen in the near future because of the crowds that form during summer months.

• The guide also stated that mental stimulation was done by giving the dolphins toys and "throwing the [dead] fish in certain different ways".

• CRAM-Q staff are individually licensed, as is the facility itself. These licenses are issued by the government and the facility is inspected once a year. One of the conditions of these licenses is that CRAM-Q cannot display the animals to the public.

• The authors were permitted to take pictures on site, but only under the condition that they would not post them in any media (including social media).

• CRAM-Q had previously had another cetacean at the centre: a pilot whale (*Globicephala melas*), which was 'rescued' and eventually transferred to Lisbon Zoo where she was used in the daily commercial dolphin shows. We were informed this transfer was due to her large size. She has since died.

### 3.3. Online research

On YouTube, the senior author was able to view and download various videos comprised of approximately 11.5 minutes of footage of Martinha from the channel belonging to Salvador Mascarenhas, one of the personnel involved in some of the procedures shown in the videos. The CRAM-Q Facebook site was also reviewed, which provided details and photographs of Barra. These have been downloaded and are on file with the senior author.

## 3.3.1. YouTube footage

These videos have given the authors of this report a better insight into the lives of the dolphins at CRAM-Q. They show events such as blood extraction (carried out in the unconventional fashion of extracting from the dorsal side of the tail fluke), Martinha being transported into the "big" pool for the first time (see Figures 1 & 4) and a news report where the CRAM-Q vet talks about their work. These have been downloaded and are on file with the senior author.

## 3.3.2. Background on CRAM-Q

CRAM-Q is the branch of a scientific NGO called the Sociedade Portuguesa da Vida Selvagem (SPVS). Their website (in Portuguese only <u>http://cramq.socpvs.org/</u>) states that their mission is to "rescue, recover, and return marine animals to nature" (translated

from Portuguese), as well as try to "contribute to the scientific knowledge" on these animals.

Previously, information on (and photographs of) Martinha were available on CRAM-Q's website but her profile has since been removed and we are no longer able to access any information regarding her. Likewise, there is no information on Barra and the section "Current patients" has been 'under construction' for months. There is no information on the website indicating that the facility has held Martinha for over six years. However, CRAM-Q does state that they have had 'patients' of seven species of cetacean, including common dolphins "Golfinho-comum" (*Delphinus delphis*) (http://cramq.socpvs.org/pacientes/).

3.3.3. Background on the dolphins from online sources

CRAM-Q's Facebook page was reviewed. It was created on 29 May 2011 and provides through its posts an incomplete timeline of events regarding Barra's rescue, transportation and housing at CRAM-Q. Nine posts and 12 photographs were download and are now on file with the senior author. Details of each animal are as follows:

- Martinha

6 September 2007 – Stranded and rescued. Estimated to be 5-6 months old.

#### - Barra

10 December 2012 – Rescued [CRAM-Q staff informed the authors that she had been entangled in a net off the coast of Barra Beach 40 38 36 N, 008 44 48 W, but we can find no supporting information to substantiate that claim].

19 December 2012 – CRAM-Q states Barra's liver problems and that medicines used in an attempt to treat this condition were being "reformulated".

22 December 2012 – 6 photos. A night shift with Barra (Figure 7), showing how she is kept afloat.



Figure 7. A CRAM-Q volunteer or staff member does a night shift with Barra, helping her stay afloat and guiding her around the medical pool. She remained in the pool until July 2013 (over half a year later) when she was moved to the larger pool with Martinha. (Photo CRAM-Q Timeline, 22 December 2012).

24 December 2012 - 1 photo. Barra's photo is used as a virtual Christmas card on which CRAM-Q state "Our wish is for Barra to get better from all her problems and for her to have the possibility to one day return to the wild."

3 January 2013 – "After 2 complicated days with Barra having a lot of colic pains, today she seems more active! She spent almost all afternoon swimming and had only a few colic episodes".

5 January 2013 – Barra is swimming on her own when she doesn't have colic pain. "The microbiology results will arrive and will detect any dangerous bacteria that are provoking the intestinal disturbances. We have already altered the antibiotics and we hope they give us good results."

10 January 2013 – 1 photo. "1 month taking care of Barra! She is getting better from her gastrointestinal problems and has gained weight and doesn't need support to swim."

13 January 2013 - 1 photo.

10 April 2013 – 1 photo. CRAM-Q celebrate four months with Barra and state details of the rehabilitation: "It has been 122 days of total attention, with over 3000 hours of observation and caring. At the moment we are following a de-parasite protocol for Barra that will extend for a few weeks more. Her parasite quantity was so high that the medicines had to be given to her very slowly and in small doses so that she wouldn't suffer adverse reactions. During this period Barra has eaten more than 500 kg of fish and we have spent over 2000€ on analysis and 1500€ on medicine. We have also used 2000m3 of water and 24 tons of salt. We would like to thank all the technicians of SPVS, the Universities of Minho and Aveiro, and the over 30 volunteers who have, since the 10th of December 2012, done many 8 hour shifts (some even 16 hours!) and have contributed to the wellbeing of Barra at CRAM-Q!"

16 July 2013 – 2 photos. Barra is transferred to the bigger pool with Martinha.



Figure 8. The photograph that CRAM-Q uses on their timeline that shows Barra swimming inside the larger tank. . Note the green colour of the water.

Figure 8 is the most recent posting on either of the two dolphins held at CRAM-Q. It is of note that until the date of this report (13 July 2014) there has not been any information on social media regarding the cetaceans for approximately 1 year.

- 4. Discussion and Implications
- 4.1. The tank

The tank at CRAM-Q is grossly undersized for the keeping of any cetacean. If it was to be used at all, it should only be considered for extremely short-term use (hours / days); first-response / acute care during the post-stranding recovery period. All cetaceans, after this brief period should be transferred to a seapen for rehabilitation and where at all possible, ultimately for release.

A tank of such an extremely small size inordinately constrains all natural behaviours of any cetacean and as such it is an impediment to the rehabilitation process. The known home ranges of common dolphins are extensive, e.g., 200 km (Neumann et al., 2002), 500 km (Evans, 1982) and 1,000 km (Genov, et al., 2012) and the species follows seasonal shifts in distribution (Neumann 2001, Murphy et al 2013). Such movements are simply not attainable in this CRAM-Q tank and any dolphin held there would become grossly unfit.

Although there are no legal standards for a short-term medical or recovery tank for cetaceans, other standards for dolphinaria provide guidance, especially since the dolphins, particularly Martinha, have been subjected to long-term captivity. In the European Union, all but one Dolphinaria are regulated by the Zoos Directive (EC Directive 1999/22) and additionally, each country's applicable national legislation.

Only five EU member states have specific legislative standards for the keeping of cetaceans in captivity: Belgium, Finland, Italy, Poland and the United Kingdom (Whale Dolphin Conservation & Born Free Foundation, EU Zoo Inquiry, 2011). Although there are no legal minimum standards for cetacean tank sizes in Portugal, at least one of the two dolphinaria in Portugal adheres to standards and guidelines as a member of the European Association of Aquatic Animals (EAAM). For comparative purposes, the minimum size of the enclosure for bottlenose dolphins (Tursiops sp.), under the Standards and Guidelines in place for EAAM members, can be used. EAAM requires a surface area of  $550m^2$  for a collection of up to six dolphins, in comparison to the  $91m^2$ of surface area in the CRAM-Q tank (EAAM, Standards and Guidelines for the management of bottlenose dolphins (Tursiops sp.) under human care at 4.2.4.1.7(1)). Half of that surface area  $(275m^2)$  is required to have a minimum depth of 3.5m whereas the CRAM-Q tank has a maximum depth of 2m (Id. at 4.2.4.1.7(2)). The minimum volume of the pool should be  $2000m^3$  (Id. at 4.2.4.1.7(3)). Overestimating by using a standard depth of 2m, the CRAM-Q tank falls significantly short at 182m<sup>3</sup>. These figures demonstrate the CRAM-Q tank is nowhere near close to the recognised minimum standards that would be expected for a medium or long-term cetacean holding facility.

As CRAM-Q is a rehabilitation center, this raises the question as to what minimum standards they are regulated by, if any at all? Furthermore, their status also raises the question as to what point the retention of a cetacean, obtained by/for rescue, rehabilitation and release, transforms into circumstances more closely resembling that of permanent captivity, which should be regulated.

Keeping dolphins in such small quarters for extended periods of time has adverse implications to their health. Stereotypic behaviours, severe aggression towards conspecifics (and humans) and other behavioural problems frequently arise in predators denied their natural foraging behaviour (Clubb & Mason, 2003). Their physical condition will also be severely compromised, leading to muscle atrophy and other conditions that will make the dolphin's rehabilitation an even more difficult process.

### 4.2. Environmental enrichment

Article 3(3) of the EC Zoos Directive specifically states that animals kept in zoos must have 'species-specific' enrichment. Even though CRAM-Q, as a 'rehabilitation centre' not open to the public, may not be bound to this legislation, the needs and welfare of the animals remain and these are clearly not addressed at CRAM-Q.



Figure 9. Authors Sánchez and Visser observe Martinha and Barra in their tank. This photograph gives sense of scale of its dimensions, however, the featureless environment of the tank is not that overly evident (Photo Barefoot, 23 March 2014).

Cetaceans in captivity are in constant need of mental stimulation through an array of enrichment options and as such one of the biggest tasks for care-takers is to ensure the correct stimuli are provided.

Through observation and discussion with CRAM-Q staff, it seems that little enrichment is being provided to the dolphins. Furthermore, staff are apparently limiting human contact with the dolphins. This "hands-off" approach is apparently under the guise that the CRAM-Q staff are preparing the dolphins for release. However, the authors neither saw nor heard of any part of the current 'rehabilitation' process that warranted such an approach. Instead, the authors believe that this approach is not adequate for the stagnated stage in the rehabilitation process. It has been noted, with respect to animal welfare, that in instances of captivity where the environment is sterile, limiting stimuli to that which occur in the captive environment is not always advantageous to an animal's welfare and that non-natural stimuli could sometimes offer more benefits (Wells, 2009).

With no rehabilitation and release plan drafted, no seapen location identified and an apparent reluctance by the CRAM-Q staff to start the seapen process during the summer months, it is clear the rehabilitation programme has been halted. Unfortunately, all of these factors leave Martinha and Barra in unacceptable, cramped conditions, with little to no stimulation.

### 4.3. Diet

The sardine (*Sardina pilchardus*) is an important prey species of wild common dolphins (Silva, 1999; Santos et al., 2004), however, they also target other species such as blue whiting, sand smelts, *Trachurus* and scomhrid species, etc. (Silva, 1999). Our information suggests that at CRAM-Q Martinha and Barra are primarily fed sardines.

The Guide informed us that the dolphins were fed by their caretakers throwing fish into the tank from distance and that attempts have been made to introduce them to live fish in the past. The authors were shown a small fish tank which was allegedly used for keeping live fish but this was not currently in use as no fish were present. The Guide also indicated that staff does occasionally place the dolphins' food in 'toy devices' so that the dolphins must 'work' for their food.

Whilst looking at more stimulating ideas for feeding dead fish is encouraged, one of the primary (if not the most important) stages of rehabilitation is for the dolphins to recognise live fish as food items and then learn/relearn the correct foraging and hunting skills required in the open ocean. Without this, it will be impossible for Martinha and Barra to return to the wild. Therefore, the authors strongly recommend the feeding of live fish as a priority. Apparently, both dolphins, during their time at CRAM-Q, were fed live fish in the past. Therefore, it can be done again and any difficulties that may have arisen for CRAM-Q in this process should be addressed and the protocols modified to allow the dolphins the opportunity to redevelop this skill.

### 4.4. Rehabilitation and release

Martinha was rescued at an estimated 5-6 months of age. She has now been in the tank for over six years (and with Barra for over one year). Rehabilitation should have been well advanced by now.

Barra, found entangled in a net, was an adult female when captured (as noted by the abortion of her calf not long after rescue). As such, she will have learnt all the appropriate foraging skills and rehabilitation should be swift. Her skill set may be passed on to Martinha through passive observation and possibly through interactive learning (e.g.,, simulated competition). Most studies regarding imitation in cetaceans have been done with bottlenose dolphins and a number of them have shown that this species is clearly capable of both vocal and motor imitation (Bauer & Johnson, 1994; Kuczaj et al., 1998; Richards, 1986; Richards et al., 1984). This leads us to believe that the same should be applicable to common dolphins. In effect, certain aspects of the rehabilitation process should be made easier for the naive and younger Martinha can learn by imitating.

Moreover, several factors support the potential success of Martinha and Barra's release, particularly if they are released a pair. Common dolphins are known to live in fluid fission-fusion societies (e.g., the population off the east coast, North Island, New Zealand, Neumann, 2001). As such, introduction into a group should pose little, if any problem. Acceptance into any group should also be eased by both dolphins being female.

Common dolphins, considered a 'smaller' species of cetacean, may find advantages to living in large groups, which are *inter alia*; ready access to mates, cooperative foraging and protection from predation (e.g., da Silva & Terhune, 1988).

Common dolphin distribution along the Portuguese coastline isn't well documented, but the species is sighted frequently off Figueira da Foz (coastal city near Quiaios). Reintroducing Martinha and Barra to this population could provide the most logical option. However, the location of their release may be flexible as female common dolphins off the Portuguese coast may be mixing with individuals in the Mediterranean Sea population, or with individuals from waters further south (Murphy et al., 2006). Additionally, genetic analysis indicates that female common dolphins are passing through Portuguese waters from the Mediterranean Sea to the North Atlantic (Natoli et al., 2008).

The rehabilitation and release of common dolphins is not new, with three individuals being released so far in the USA (Zagzebski et al., 2006). Two were tagged with satellite-radio transmitters prior to their release in 1994 and 1995. One of the individuals was tracked for 31 days off the coast of California, immediately moving off shore into deep water where it began moving north. It travelled approximately 400 km within five days of release, then covered more than 250 km until radio contact was lost (Zagzebski et al., 2006). A juvenile common dolphin was also rescued and released back into his native population in the Bay of Algeciras (Spain) in the summer of 2013, after spending a night in a medical tank of small dimensions. He was observed swimming with his presumed mother, later, on the day of his release.

Even though the number of common dolphins that have been released from captivity is relatively low, more than 100 individuals (from 11 species) have been released from captivity.

Based on the information available, the authors agree that these two dolphins are possible candidates for rehabilitation and release. As this report states, the limited time with the dolphins did not allow a thorough evaluation of their current behavioural and physical state. Therefore, involvement and commitment by experts in the field of rehabilitation and release of cetaceans would be fundamental to determining if the recommended next steps (see Section 5) are appropriate. Currently, no estimates can yet be made as to the timeframe and budget of the proposed rehabilitation process.

## 5. RECOMMENDATIONS

Recognising the need for further information and a complete evaluation of both individual dolphins, certain steps can still be recommended:

1. CRAM-Q should be contacted and the welfare of the dolphins discussed.

2. Both dolphins should be immediately removed from the CRAM-Q facility as their tank does not meet the basic needs of any dolphin species. Ideally the dolphins should be held in a sea pen for rehabilitation in preparation of (4).

3. Both dolphins should be evaluated by independent and experienced cetacean experts as to their behavioural and physical status and an appropriate rehabilitation programme designed and urgently instigated.

4. Both dolphins should, if evaluated as suitable, be released into the wild with conspecifics, upon completion of the rehabilitation programme.

Furthermore, it is clear to the authors that even though a complete rehabilitation and release process is of top priority, the possibility of both dolphins having to remain in human care has to also be considered as a possible outcome. If so, the dolphins should be moved immediately into a seapen whilst a permanent sanctuary is sought. A more dynamic, stimulating and more natural environment of an ocean sanctuary would be a vast improvement on the conditions that both dolphins are subject to at present.

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