Cetacean Welfare Concerns at Sea World Gold Coast Queensland, Australia.

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Sharyn Taylor, Jackie Curtis, Jane Robinson, Jacquie Kyle © 2019

Submission to:

Mr D. Young, Chief Inspector, Royal Society for the Protection and Care of Animals (RSPCA) Queensland, Australia. (9 August 2019).

This report was composed at the request of Mr Daniel Young, Chief Inspector, Wacol Animal Care Campus, RSPCA) Queensland following cetacean welfare concerns at Sea World Gold Coast (SWGC) reported to the Chief Executive Officer and President. (RSPCA.3 June 2019).

'RSPCA member Societies enforce state and territory animal welfare legislation through their Inspectorate functions. Where incidences of animal cruelty or animal welfare concerns are reported, Inspectors have the power to investigate and prosecute those involved.'

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Supporting documentation including images not included in this publicly available version, were confidentially supplied to the RSPCA. Some samples are included in Appendices.

Cover Image: Dolphins in the Sandy Shores pens at Sea World Gold Coast. Feb 2017 - © J. Curtis

Table of Contents

1. Summary 4

2. Background 5

3. Methods of Data Collection 6

4. The Case Against Marine Mammals In Captivity 9

5. Dolphin Welfare Concerns Summary - Sea World Gold Coast 10

6. Dolphin Welfare Concerns Detailed 11

a. Poor hygiene protocols and possible non-compliance with policies for jewellery removal and in-water interactions 11

b. Ingestion of foreign objects and resulting invasive medical procedures and lack of prevention measures. 14

c. The number and ongoing incidences of open rostrum wounds and including the use of wounded animals in public interaction programs. 18

d. Trainers being pushed or pulled through the water by dolphins rostrums and dorsal fins, standing on rostrums and requiring dolphins to 'beach' for interactions. 21

e. Documented numbers of dolphins displaying worn, missing and algae covered teeth. 21

f. The lack of shade and shelter from inclement weather provided to the dolphins. 23

g. The dolphin's exposure to relentless and ever increasing noise, vibration and night lighting due to theme park activities, events and constructions and in particular to the (mostly rescued) animals kept in the Sandy Shores zone. 25

h. The inability of dolphins to go "off display" or retreat from disturbance. 32

i. Incidences of aggression and abnormal (stereotypical) behaviours 32

7. Overarching factors impacting the well-being of the dolphins 35

Space 35

Choice 35

Water Quality 37

Breeding 38

Births and Deaths 41

Stress 42

Autonomy, lack of accountability 42

8. Next steps, suggestions for RSPCA 43

9. Contacts 43

10. Appendices 44

1. Summary

Sea World Gold Coast (Sea World) is a marine animal based theme park owned and operated by Village Roadshow Theme Parks offering a mix of thrill rides, entertainment events and food to paying patrons. The facility houses a number of animals, a large variety fish, rays, sea-jellies, sharks, penguins and some bird life. It also houses large marine mammals including Polar Bears (ursus), Seals (pinnipeds) and approximately 26 dolphins (cetaceans).

The authors of this document are independent members of the general public residing in both Australia and The United States of America who collaboratively advocate against keeping marine mammals in captive environments for the purpose of public entertainment. We draw on our own collective knowledge and experience and also utilise our extensive Global network of marine mammal experts, from within and external to the captivity industry, non government organisations, independent scientists and veterinarian advisors for guidance and to 'fact check' our research.

We each understand that there will be times where wild cetaceans and other marine life may require rescue and permanent human care. We are also aware that Sea World houses a number of animals who were captured many years ago and/or were captive bred specifically to stock the park, and that those animals may never be unreleased to the wild. However we believe that no cetacean should be kept in an amusement park environment nor should it provide human entertainment or be used for breeding purposes. We believe Sea World's current model and the companies management do not prioritise the wellbeing of the animals in its care.

Our research, which began in 2014, has shown that although Sea World are required to adhere to Queensland Animal welfare legislation, display licensing requirements and are accredited by the industry-led Zoo and Aquarium Association, the company operates, for the most part, autonomously. Sea World does collaborate with government authorities when determining the fate of wild dolphins who may require rescue and rehabilitation. However those government authorities rely heavily on Sea World's expertise when making decisions about the removal of dolphins from the wild to be ultimately added to Sea World's collection.

Our research and documentation obtained through Right To Information Queensland, supported by current scientific literature, shows that there are a vast range of animal welfare concerns at Sea World on the Gold Coast. We provide a summary of a number of those concerns in this document, which in our opinion, demonstrates an ongoing and wilful neglect of the dolphins at this facility.

2. Background

Our attention was drawn to the welfare of Sea World Gold Coast's (Sea World) animals, with particular focus on its cetaceans in 2014 when the authors discovered that Village Roadshow Limited (VRL), parent company to Village Roadshow Theme Parks (VRTP) and Sea World had been developing international expansion plans since 2010. It had entered into an MOU with a Chinese developer, R & F Properties to build, manage and procure animals for a large scale marine animal theme park on Hainan Island, China.

We immediately questioned Sea Worlds ethics and involvement in this development given that in Australia the wild capture and import/export of cetaceans has been illegal since 1994, yet the animals procured to stock their new facility outside of Australia, we suspected, would be sourced from the wild or transferred wild caught animals from other facilities in the region. China was at the time and still is the largest importer of wild caught cetaceans in the world, including regularly purchasing dolphins from the infamous dolphin drive hunts of Taiji, Japan.

It was discovered by the authors during this period that Sea World also intended to collect up to 20 Whale Sharks from "off the coast of Hainan" for the development, and additionally had intentions to import a number of Beluga whales from Russia to stock the new development.

After multiple attempts spanning over 12 months to have questions about "Ocean Paradise' addressed by Village Roadshow, we were eventually contacted by Mr. Trevor Long, Director of Marine Sciences at Sea World on 17 October 2014.

Mr. Long invited our team to visit Sea World in Queensland, to show us around the facility and demonstrate to our team the way in which the company cares for its animals, so that we would gain an understanding of the 'quality operation,' from his perspective, that Sea World would take to China.[1]

We have since this time continued to investigate and gather data about Sea World's animals over multiple visits to the theme park and utilising a number of methods of information collection to assist us in our research about the dolphins in particular that reside there.

[1] In November 2015 Village Roadshow Limited announced that their agreement with R & F Properties Hainan Ocean Paradise had ended. VRLTP would no longer be involved in the development in any way.

3. Methods of Data Collection

3.1 Site Visits

May 2016 - Dr. Ingrid Visser (Orca Research Trust, New Zealand), a captive cetacean expert, Marine Biologist and scientific advisor to our team has attended marine parks all over the world to gathering valuable data. Dr. Visser visited Sea World as a paying customer to observe and photograph the conditions in which the dolphins (and other animals) are housed at the park. She was recognised taking photos at the facility, confronted by senior management and escorted out of the park.

August 2016 - Three members of our team, S.Taylor, J. Kyle & J. Curtis attended Sea World Gold Coast at the invitation of Trevor Long. We met with senior management, staff and trainers and were shown around the park. We were able to see some back of house areas such as 'the fish room,' Polar Bear 'control room,' a quarantine area holding turtles and the pools behind the stadium at Dolphin Beach. The tour excluded the dolphin pools in the Dolphin Bay area. Photographs were prohibited in the fish room and back of house at the Polar Bear area. We were not provided access to the dolphin pools at the Veterinary Quarantine Centre.

November 2016 - S. Taylor attended Sea World Gold Coast as a paying customer to further observe the animals and to see the Dolphin Bay area that had not been included during the August tour with Mr Long.

February 2017 - After an open invitation to return to the park at any time together with Dr. Visser, our team visited Sea World to discuss our animal welfare concerns and to collect further data about the facilities dolphins. The visit consisted of 2 full days at the park.

Day 1, was partially escorted by Trevor Long and included attendance at the early Nara Resort dolphin presentation, discussions with Sea World's Chief Veterinarian, senior staff and trainers. We were escorted through some back of house areas, such as the Dolphin Beach back pools where we were able to observe the 2 month old dolphin calf 'Dusty,' since deceased. We were asked not to take photos in this area despite the public regularly taking photos there. Mr Long did allow us to take some photos when we requested permission. We were escorted behind the scenes at Polar Bear Shores, where we were again asked not to take any photos or videos. We were not provided access to the Veterinary centre.

Day 2, we observed most public areas of the park unescorted, including the Nara Resort early presentation and participated in a public walk through the stadium back pools to observe Dusty. Access was granted to the inside walkway of the Sandy Shores zone for 15 minutes, where we were met by Sea World Curator Mr Mitchell Leroy and senior trainer Deane Jones. This was organised by Mr Long the previous day, for the purpose of addressing our questions about the dolphins housed in those pools.

3.2 Interviews & Correspondence

We have had telephone and multiple email follow up conversations with Trevor Long asking for further questions to be addressed. Mr. Long provided us with some of the documentation promised during our visits.

We have also conversed with Dr David Blyde (Veterinarian), Cath Atkins (Veterinarian nurse), Mitchell Leroy (Curator), Deane Jones (Senior Trainer), Zoe (Trainer) and various other animal care team members, park photographers, and other staff at the facility during site visits.

We have engaged with Queensland government departments including Biosecurity within the Department of Agriculture and Fisheries, the Department of Environment and Heritage Protection and The Office of Industrial Relations.

In March 2018 a contact who had written a complaint to Sea World related to the Carnivale event, was also invited by Trevor Long to visit the park. This contact provided our team with information obtained during that visit regarding dolphin welfare concerns.

The Zoos And Aquarium Association has been contacted, however have not responded to our concerns.

A Veterinary Review of some of our data was sourced and kindly provided by Heather D. Rally, D.V.M, PETA Foundation.

Correspondence with the administrator of the independent not for profit organisation Ceta Base, the global inventory of captive cetaceans, has provided us with advice, recommendations and historical data.

3.3 Online Research

We have conducted extensive online research over the last 5 years via social media, (Facebook, You Tube etc) national news media sites, Village Roadshow corporate documents and announcements, Sea World media releases and historical searches. Government databases have also been utilised such as the Marine Wildlife Stranding and Mortality database and IMATA ‘Soundings’ magazines.

3.4 Right To Information Documentation (RTI)

We have obtained documents under multiple successful Queensland Right To Information applications from the following Departments: The Department of Agriculture and Fisheries (Biosecurity) Queensland, Department of Environment and Heritage Protection Queensland, The Office of Industrial Relations Queensland, National Oceanic and Atmospheric Administration, USA (Historical FOI documents provided by Ceta Base).

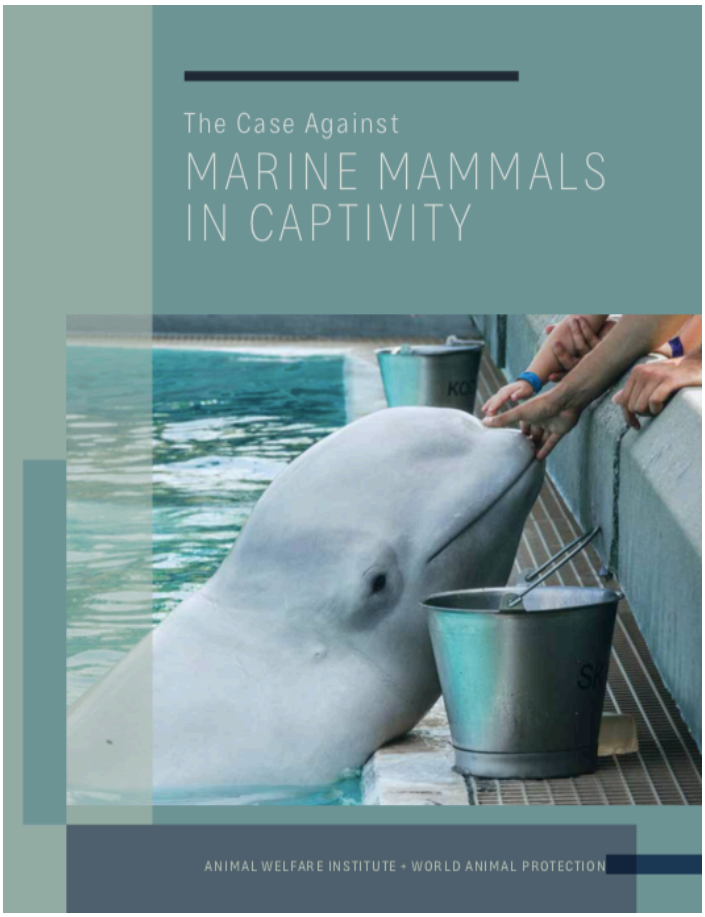
3.5 Ex-Employee Testimony

In January 2019 we were approached by an ex-employee who previously worked in the animal care department at Sea World and who wanted to speak out about what she had witnessed at the facility. Her testimony has provided further evidence of poor animal welfare standards and includes information about the treatment of staff who voice concerns to management. Additionally she has provided some corroboration of information that we had already obtained through RTI; to which she was not privy.

4. The Case Against Marine Mammals In Captivity (CAMMIC)

We refer to and highly recommend The Case Against Marine Mammals in Captivity, 5th Edition as a valuable reference. It provides an excellent overview of the welfare issues and points to the relevant supporting scientific literature as it relates to the keeping of cetaceans in captive, theme park environments. Additionally in the absence of any standards for exhibiting dolphins in Queensland, we provide some references to NSW legislation Exhibited Animals Protection Regulation 1995, Standards For Exhibiting Bottlenose Dolphins in New South Wales.

"With any marine mammal exhibit, the needs of the visiting public come before the needs of the animals. Enclosures are designed to make the animals readily visible, not necessarily comfortable. Public display facilities maintain that they enhance the lives of marine mammals in captivity by protecting them from the rigors of the natural environment. The truth is that marine mammals have evolved physically and behaviorally to survive these rigors. For example, nearly every species of marine mammal, from sea lion to dolphin, travels large distances daily in a search for food. In captivity, space is constricted for these wide-ranging species and natural feeding and foraging patterns are completely lost. Stress-related conditions such as ulcers, stereotypical behaviors such as pacing and self-mutilation, and abnormal aggression within groups frequently develop in predators denied the opportunity to hunt. Other natural behaviors, such as those associated with dominance, mating, and maternal care, are altered in captivity, which can have substantial negative impacts on the animals' welfare.



Wild-caught marine mammals gradually experience the atrophy of many of their natural behaviors and are cut off from the conditions that allow the expression of cultural traits such as specialized vocalizations and unique foraging and hunting techniques. Trainer and visitor interactions do not adequately replace the expression of natural behaviors—whatever "enrichment" these interactions provide is only necessary because the animals are in captivity in the first instance. In addition, viewing captive animals gives the public a false picture of the animals' natural lives. Worse yet, it desensitizes people to captive marine mammals' inherent suffering—for so many captive marine mammals, the world is a tiny enclosure, and life is devoid of naturalness."

Rose, N.A. and Parsons, E.C.M. (2019). The Case Against Marine Mammals in Captivity, 5th edition (Washington, DC: Animal Welfare Institute and World Animal Protection), 160 pp. (CAMMIC, Rose, N.A et al.)

5. Dolphin Welfare Concerns Summary - Sea World Gold Coast

Our research and data collected has demonstrated a number of welfare concerns specific to the dolphins at Sea World Gold Coast that require immediate action in order to prevent their further suffering at the facility.
Welfare concerns include, but are not limited to:

a. Poor hygiene protocols and possible non-compliance with policies for jewellery removal and in-water interactions.

b. Ingestion of foreign objects and resulting invasive medical procedures, and lack of prevention measures.

c. The number and ongoing incidences of open rostrum wounds, and including the use of wounded animals in public interaction programs.

d. Trainers being pushed or pulled through the water by dolphins rostrums and dorsal fins, standing on rostrums and requiring dolphins to 'beach' for interactions.

e. Documented numbers of dolphins displaying worn, missing and algae covered teeth.

f. The lack of shade and shelter from inclement weather provided to the dolphins.

g. The dolphin's exposure to relentless and ever increasing noise, vibration and night lighting due to theme park activities, events and constructions and in particular to the (mostly rescued) animals kept in the Sandy Shores zone.

h. The inability of dolphins to go "off display" or retreat from disturbance.

i. Incidences of aggression and abnormal (stereotypical) behaviours.

See Also:

7. Overarching factors impacting the well-being of the dolphins:
- Space
- Choice
- Water Quality
- Breeding
- Births and Deaths
- Stress
- Autonomy, lack of accountability.

6. Dolphin Welfare Concerns Detailed

a. Poor hygiene protocols and possible non-compliance with policies for jewellery removal and in-water interactions

Facilities that allow direct human contact with marine mammals … are exposing their customers to possible infection and injury. The reverse is also true – such facilities are exposing their animals to possible human diseases or injury as the result of inappropriate behavior by the public. - CAMMIC, Rose, N.A et al.

Dolphins' skin is their immune system's first line of defense, and the routine compromise of this important defensive barrier can have serious health implications. Extensive or repeated breaks in the skin not only are painful but also expose the tissues and blood vessels to environmental pathogens, increasing the risk of localized and even systemic infection. - HD.Rally et al.

At Sea World there are a number of 'experiences' or animal adventures allowing the public to interact with the dolphins. Participants enter the dolphin pools and are permitted to touch, hold, play with, feed and have their photos taken with the animals. These activities offer no protection to the dolphins from potential zoonotic pathogens.

Dolphins (and humans) are at risk of contacting zoonotic disease, in particular through open wounds. Dolphins are also exposed to chemicals from participants wearing sunscreen, deodorants, insect sprays, perfumes and aftershaves. Exposure is particularly high at the Sandy Shores zone. Interactions take place throughout the day and in all 3 dolphin zones. (Figure 1)
Dolphins can be at risk when interacting with young children due to their unpredictable behaviour when excited and around animals.

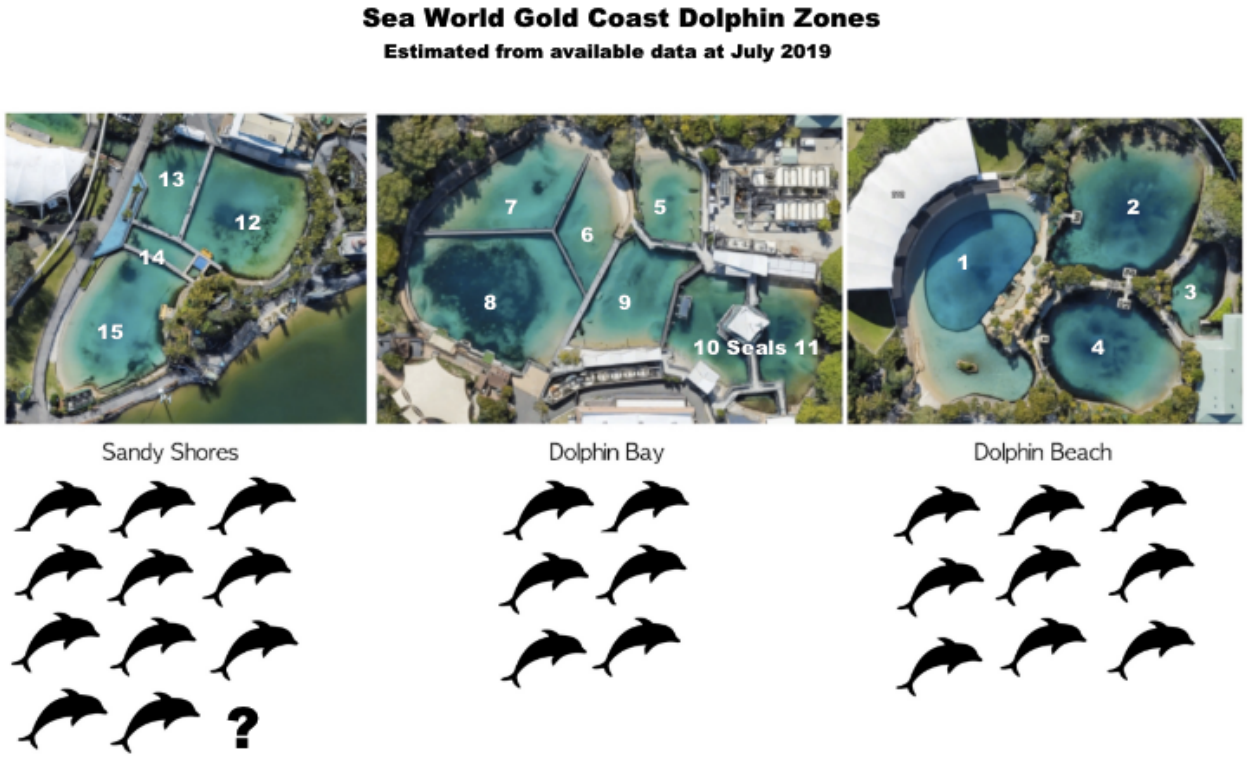
Dolphin Beach Private-paying, corporate and charity guest interaction programs are conducted throughout the entire day in the two 'back of house' pools (2 & 4). These interactions can run concurrently with the Affinity show's in pool 1 and also take place between and after show's in the stadium pool. During the Affinity presentations audience members are selected to interact with a dolphin.

Dolphin Bay Interactions take place in pool 8 where participants sit on a platform with their legs in the water and where they are able to pat and have photos taken with the dolphins. A recent social media posts by Sea World shows that interactions appear to now also include pools 6 and/or 7.

Sandy Shores Shallow and deep in-water encounters take place in pool 15 where groups of participants including families and children enter the dolphin pool and are able to experience the dolphins swimming under them, around them and includes petting, etc. 'Dolphin Aqua Adventure' programs are available 7 days a week and have approximately 2 groups of 6 public participants per program throughout the day and includes trainers and photographers.

Figure 1

Seaworld - Gold Coast, Australia
Vet Centre inc. Dolphin Pool
Sandy Shores
Dolphin Bay
Dolphin Beach
Dolphin Trainers Staff Room
© 2018 Google
Google Earth


Sea World Gold Coast Dolphin Zones
Estimated from available data at July 2019
13
12
14
15
7
6
5
8
9
10 Seals 11
2
1
3
4
Sandy Shores
Dolphin Bay
Dolphin Beach
?

Supporting Information

- Sea World Animal Adventure criteria documents require:

  Participants must not have any open cuts or infections and to inform staff of any medical conditions during check-in;
  Guests are not permitted to wear any visible jewellery including but not limited to; necklaces, bracelets, ear rings, body piercings, religious and cultural ornamentation, hair clips and pins (a single hair band is permitted) or any other accessories deemed not suitable in the program environment. Any item that cannot be removed will need to be secured with tape available at the Animal Adventures Check-in Centre;
  The minimum guest requirements for participation are 5 years of age and over and at least 110cm in height. Any guest under 5 years of age, regardless of height, is not permitted to enter the water to meet the dolphin. Similarly, any guest under 110cm in height is not permitted to enter the water to meet the dolphin.

- A signed document does not ensure that participants disclose a disease or infection, participants may not even be aware they have an infection or disease at the time of participation.
- Participants are not required to wash their hands or feet before entering the dolphin pools.
- Our team have observed interactions in all 3 dolphin zones where participants including children have entered the water and are encouraged to touch and feed dolphins, without being required to first wash their hands or feet.
- During the Affinity presentation audience members are called from the audience, asked to remove footwear and are encouraged to step directly into the water with dolphins where they touch and feed them.
- Participants and trainers have been observed touching dolphins on or near open rostrum and tail fluke wounds. Also see further information at point ‘c’ regarding wounds. Appendix 1
- Interaction participants, despite Sea Worlds criteria, have been observed wearing jewellery. Appendix 2
- Young children have been seen during animal encounters interacting, touching and lying down in the water with faces next to the dolphins whilst out of reach of parents and trainers, putting both the dolphins and children at risk of serious injury. Appendix 3

Sea World Says:

Sea World management says:
“there has never been any evidence of zoonotic disease transfer from captive dolphins.”
Jewellery is not allowed in the pools.

b. Ingestion of foreign objects and resulting invasive medical procedures, and lack of prevention measures.

"The reasons for the high incidence of foreign body ingestion in captive cetaceans are not clear. The captive environment, due to its obvious spatial limitations, is at best an abnormal one. The social behavior of these animals has been severely altered (Caldwell et al. 1968). Ridgway (1972) suggested that since captive animals are taught to consume dead fish, they may consider any object entering the pool as edible. Excitement of training, performing, play behavior, and competition for food may also be contributing factors (Nakajima et al. 1965). What is clear from the accounts on captive cetacean ingestion of foreign objects is that it has the potential for being a direct cause of mortality, or at least debilitating to a degree which could predispose animals to disease or predation in the wild state.- HD Rally et al.

Exhibited Animals Protection Regulation 1995, Standards For Exhibiting Bottlenose Dolphins In New South Wales Clause 2.1.5 c States " Precautions must be taken to prevent any foreign bodies entering pools. Pools must be thoroughly checked for foreign bodies at least twice a day."

Dolphins are predators and naturally curious mammals unable to exercise their instinct to hunt and forage at Sea World. This limitation leads to boredom and frustration resulting in abnormal, repetitive or 'stereotypical' behaviours that, when combined with physical hazards, presents serious risk to the animals.
Accidental injury, self-harm, and ingestion of foreign material, through repetitive contact with structures and objects or of items that have fallen into their otherwise barren enclosures can occur.

<u>Supporting Information</u>

- The sand bottomed artificial enclosures at Sea World appear naturalistic in comparison to concrete tanks, however the animals are still enclosed in tiny barren pens when considering the vastness and complexity of their natural habitat–the ocean.
- The sand substrate may allow the dolphins to 'forage' however there is nothing natural in the pools that the dolphins are able to forage for. Dolphins will manipulate objects within their enclosures and may also echolocate, retrieve and ingest objects from beneath the sands surface.
- The sand bottoms present the following concerns:

  the ability to achieve appropriate filtration;
  accumulation of waste not visible to staff;
  debris or foreign objects that fall in the pools are concealed in the sand, not visible to animal care staff
  accessible objects such as filtration mechanics, piping and grates beneath the sand surface.

- Dolphins may ingest debris from surrounding rocks or by breaking, scraping or chewing off debris from platforms, concrete tunnels, pylons, gates, barriers and filtration devices. Appendix 4
- Sea World policy prohibits jewellery in the dolphin pools however patrons have been observed wearing jewellery during interactions (described in section 'a'). These items may fall in the pools and be ingested.

- The new ‘Vortex’ ride construction adjacent to the Sandy Shores pools presents further serious concern regarding the potential for debris to enter the pools both during construction processes and as well as from falling objects once the ride is open and operating.
- Documents obtained through Right To Information Queensland (RTI) and ex-employee testimony show that dolphins regularly ingest foreign objects at Sea World. Documented. Cases include where animals have been removed from their usual enclosure and transported to the Veterinary Quarantine Centre (VQC) and kept there for extremely lengthy periods. *Document files supplied.*
- RTI obtained and corroborating testimony describes invasive and extreme medical procedures to retrieve ingested objects from dolphins digestive systems.
- Testimony and Sea World’s own reports show that park management appear to have not taken any significant measures to prevent foreign body ingestion. Instead RTI documents show Sea World veterinary staff and management consider the best way to manage foreign body ingestion is to quarantine dolphins in small tanks for months or to invasively intervene.
- The vet centre quarantine tanks are painted concrete and are significantly smaller than the dolphins usual pools (Figure 2). The medical tanks may only be used temporarily, however they are severely restrictive, and documents show multiple dolphins have been held in theses tanks for months due to foreign object ingestion.

Right To Information:
Documents show a complaint lodged with Biosecurity in June 2012. When requested by the department, Sea World’s response showed that 4 dolphins, we believe to be from 2 different dolphin zones (Dolphin Bay and Sandy Shores), had been ‘off-display’ and quarantined in the Vet centre due to foreign object ingestion.
All 4 dolphins were kept quarantined in small concrete tanks, not designed for long term residence, and where they were either ‘passively regurgitating’ objects or being medically treated for the following approximate periods of time:

Tuffi - 8 months;
R.B. - 4 Months;
Nudgee - 2 months;
Bala - 2 weeks (now believed deceased).

Figure 2

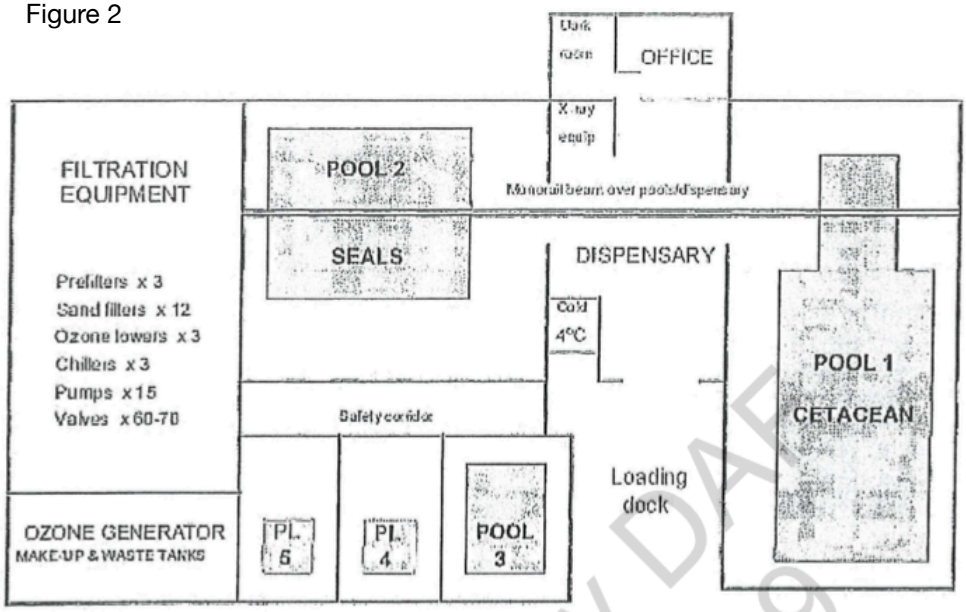


Figure 1. Floor plan of Sea World's Veterinary Quarantine Centre (*approximately* to scale 1:200)

Released by DAFF under FOI Act 2009

SPECIFICATIONS	*POOL 1*	*POOL 2*	*POOL 3*	*POOL 415*
Designed to manage:	*cetaceans*	*large seals*	*small seals*	*small seals*
Length (m)	*15*	*8.5*	*4*	*2.5*
Width (m)	*6 (3-6)*	*6*	*2.5*	*2.5*
Depth (m)	*2*	*2*	*1.5*	*1.5*
Surface area (m^2)	*78*	*51*	*10*	*6.25*
Volume (litres)	*150,000*	*102,000*	*15,000*	*9,375*
Turnover time (min)	*63*	*54*	*60*	*60*

Cetacean Area (Pool 1):

The main body of the cetacean pool measures 11m x 6m x 2m deep. At one end is an "extension" which is 4m x 3m x 1.5m deep. The extension was designed to accommodate a jig platform which could be used to raise cetaceans up out of the water, and the straight sides of the pool were intended to facilitate drafting (unconditioned) animals down the pool until they were over the platform. Even without a jig platform installed the extension has still proved extremely useful because its shallower depth allows people to stand, which enables passive cetaceans to be restrained for blood collection or stomach tubing near the side of the pool without needing to be lifted out. The cetacean pool can be dropped to any depth between 2.0 - 0.6m (and still have continuous filtration) to allow weak animals to be "walked" around the pool by handlers. Very debilitated animals can be slung in the water in stretchers anchored from the monorail overhanging the extension.

Testimony:
An ex employee of Sea World's animal care department provided testimony regarding foreign object ingestion at the park, why she believes it occurs and described the lack of action by Sea World management to address the issue.
The employee was not aware of the documents we had obtained through RTI however her testimony corroborated some of the information within it.
She described in detail seeing items such as bolts and chains that had been removed from a dolphins guts and saw first hand the cruel methods that were used by staff to retrieve, by hand, these ingested items. -*Source Supplied*
She also describes how trainers were asked to put on a snorkel and stick their heads in the water and try and look for anything on the surface of the sand.

Media:
Media reports about the dolphin Amity (since deceased) demonstrate further evidence of items falling into the pools.
Amity is also a hoarder, grabbing and hiding coins, sunnies or whatever else happens to fall into her watery territory. She has a little stash – sometimes our divers go in and raid it, but she just starts it again.
A young dolphin died in 2015 at a Coffs Harbour facility after ingesting foreign objects and suffering a similar procedure to what was endured by Tuffi at Sea World.

Sea World Says:
- August 2016 - Mitchell Leroy (Curator) was directly asked about foreign object ingestion, his response to our team was *"What do you mean?"* We explained further describing debris entering the pools and he then state*d "No, don't have that problem"* He advised they occasionally 'vacuum' the sand.
- Sea World management states: *"Like animals in the wild the dolphins play with many objects and dig in the sand."*

c. The number and ongoing incidences of open rostrum wounds and including the use of wounded animals in public interaction programs.

It is common for captive dolphins to injure their rostrum while confined to a restrictive environment in which they're surrounded by unnaturally hard surfaces, such as concrete and metal, that easily cause trauma to the skin.Despite the obvious vulnerability of the rostrum to injury and the evidence of existing wounds on numerous dolphins, SeaWorld continues to force these animals to perform demeaning tricks that could cause skin abrasions in that area - HD Rally et al.

At each visit to Sea World we have observed and photographed a large number of dolphins with wounds ranging from superficial nicks, scrapes and scarring from previous injuries such as teeth or 'rake' marks, and also open and 'raw' wounds.
When we asked Sea World management and senior staff about some of the more serious wounds, they seemed perplexed. Trevor Long was also unaware of wounds and asked us to provide images to him. When provided with photographic evidence, Mr Long stated that the rostrum wounds presented were *"superficial," "not unusual"* and *"from natural interaction with other animals"* and that similar injuries *"can be found in wild dolphins."*

<u>Supporting Information</u>

- We have observed and photographed a large number of open wounds including:
- multiple dolphin rostrum wounds (Table 1) eg:

  A tail wound open over multiple site visits (Cliffy);
  A dorsal fin wound open over 2 visits (Howie);
  A number of dolphins displaying sunburn, cuts, scratches, healed teeth (rake) marks and other scarring which may also be the result of aggression between confined pairs or groups of animals; *Appendix 5*
  The use of dolphins with open wounds in public interactions, where participants and trainers come into contact with these open injuries.

- Images were sent to Dr Heather D. Rally, D.V.M, Supervising Veterinarian at PETA Foundation who provided a veterinary review.
- Dolphins have been photographed displaying open wounds, the number of which represents at almost 50% of all the dolphins at the facility.
- Every dolphin at the Dolphin Bay zone (all males, mixed species) has been observed to have a rostrum wound:

Sandy Shores	Cliffy, Howie (Dorsal), Nudgee, Amity (since deceased)
Dolphin Bay	Cohen, Zac, Cyrus, Starbuck, Tuffi, R.B (all dolphins in this zone)
Dolphin Beach	Evie, Kiama, Gemma

Table 1 = Rostrum Wound

Dolphin Bay (Central Pens) Mixed species Inshore & Offshore Bottlenose (2 x T.aduncas & 4 x T. truncatus) 6 Males			
Cohen or Coen	Rostrum Recurring	Nov 2016 Feb2017	Observed in public Interactions whilst having open wounds
Cyrus or Sirius	Rostrum	Feb 2017	Observed in public Interactions whilst having open wounds
Tuffi	Rostrum Recurring	Nov 2016 Feb 2017	No interactions?
Starbuck	Rostrum Old large sunburn scar from slide out incident, (See shade section g.)	Feb 2017	Observed in public Interactions whilst having open wounds
Zac	Rostrum Open	Feb 2017 (?)	Public Interactions
Rat Bait or Rat Bag (RB)	Rostrum Scaring	Feb2017	No interactions?
Sandy Shores (Dolphin Nursery), Endeavour Pools. Inshore Bottlenose (T. aduncas) 6 Males? 5 Females?			
Cliffy	Rostrum/Tail Fluke Open Recurring *Entanglement scars/Blind one eye	May 2016 Tail Nov 2016Rostrum Feb 2017Rostrum & Tail Aug 2017 Tail (social media)	Observed in public Interactions whilst having open wounds
Gladys			Presentations
Kyra	Drum Line/entanglement old scars/Blind one eye		?
Melody			Presentations
Nudge	Rostrum Wound (SW Post)	March 2017	Presentations?
Raaf	Old sunburn scar from stranding		?
Howie	Dorsal Open Recurring Entanglement scars	May 2016 Dec 2016? Feb 2017?	Public Observed in public Interactions whilst having open wounds
Zippa			?
Tallulah			Presentations
Huey			?
Amity (Deceased)	Rostrum Open (described as a hole)	Nov 2016 Feb 2017	No Interactions
Hallie?			?
Sumi?			?
Dolphin Beach (Stadium Area) Offshore Bottlenose (9 x T. truncatus) 1 Male 8 Females			
Evie			Show/Public Interactions
Gemma		February 2017	Show/Public Interactions
Jinx	Rostrum Scaring	August 2016	Show/Public Interactions
Kiama	Rostrum	August 2016	Show/Public Interactions
Moki			Show/Public Interactions
Scooter			Show/Public Interactions
Squeak			Show/Public Interactions
Stella			Show/Public Interactions
Sunnie			Show/Public Interactions

Testimony:
When shown a series of photos of Cliffy's tail fluke wound, an ex-Sea World employee stated that she assumed he was *"probably rubbing it"* and that unless there was some other animal involvement then you can *"assume that its a stereotypical behaviour."*

Sea World Says:

- On 24 February 2017 during discussions about the dolphins at Sandy Shores between Mitchell Leroy (Curator), Deane Jones (Senior Trainer) and our team, we enquired directly about Cliffy's open tail wound. Both Deane, who said he had worked with Cliffy the day before, and Mitchell, did not recall anything out of the ordinary or not "normal." When it was pointed out that the wound was 'open and raw,' Deane responded, *"he could have bumped or rubbed it, or just be sitting on his tail."* Mitchell said he *"could rub it through the sand."* When we persisted in our questioning, Deane said he would have Sea World's Vet look at it. Appendix 6
- With regard to Amity's rostrum wound, Deane said *"he could have bumped it."* When mentioned that the wound was there on a previous visit 3 months prior, Mitchell agreed it could be *"the same one."* Mitchell also stated that their Vet checks all the time and that it was "fine."
- Both Cliffy and Amity's wounds were documented over multiple site visits.
- After reviewing our photographs and videos taken during our February visit, the seriousness and number of dolphins presenting with wounds became more apparent. We followed up via email with Trevor Long and he requested we send him images of dolphin wounds that we had told him about. In his response Mr Long stated that: *"The staff are all professionally trained and experienced marine mammal keepers, who work with and monitor these animals on a daily basis. I discussed with our Veterinarian, David Blyde and our Curator of Mammals and Birds, Mitchell Leroy about the injuries identified in your images and they have advised me that they are mild superficial injuries from natural interaction with other animals. In particular your concerns with Cliffy relate to granulation tissue where the fish hook/line was embedded initially when he was injured and he occasionally knocks the top off this lesion.Please remember our pools are natural sand bottomed pools and like animals in the wild the dolphins play with many objects and dig in the sand. The dolphins at the front of the park are mostly young males who demonstrate social hierarchical behaviour which is no different to dolphins in the wild."*
- Mr Long said he would provide updated images to us that showed the healing of these injuries, however those updated images were never forthcoming.
- We approached Mr Long again regarding the promised images however he advised that he no longer saw the benefit in continuing our dialogue. *"We manage our animals in the most professional manner with the highest priority towards positive animal welfare. While we will remain respectful of Melbourne Dolphin* and the role they play within our society, I consider continued communication as already undertaken not beneficial for either party due to our differing views and opinions."* *MelbournDolphin was the name our group was using at the time
- In August 2017 Sea World posted an image of Cliffy to their Social Media that showed both his tail fluke and rostrum to be raw, however we have no way of knowing when these images were taken.

d. Trainers being pushed or pulled through the water by dolphins rostrums and dorsal fins, standing on rostrums and requiring dolphins to 'beach' for interactions.

The dolphin's lower jaw, or mandible, supports nearly the full force of the trainer's bodyweight during tricks that involve standing on the rostrum. The mandible is a sensitive structure that plays an important role in hearing. It is filled with delicate fatty tissue that allows dolphins to receive underwater sound vibrations through the jaw bone. These are then transmitted directly to the middle ear, where they're perceived as sound (Rommel, Costidis, & Lowenstine, 2018). Thus, the bones and joints of and around the mandible are important to the animals' acoustic health, and routine exposure to excessive or abnormal force on these structures could not only be uncomfortable but even cause damage. - HD. Rally et al.

Behaviours are presented in Sea World's shows and interactions that ask the animals to perform behaviours that are not natural and are in some cases harmful to the dolphins. eg. tail walking, dancing, tongue rolling, rostrum pushes, dorsal pulls, rocket hops, beachings and jumping in front of and over a boat.
These conditioned or trained behaviours are not underpinned by animal welfare rather are trained theatrics to provide audience enjoyment, petting experiences and photo opportunities.
All of these behaviours present the animals in a way that is 'devoid of any biological significance to them or educational value to the public.' Some are demeaning and place the dolphins at risk of physical injury:

<u>Supporting Information</u>

- Trainers have dolphins 'beach' or 'slide out' on the shores of pools, where they are kept for lengthy periods of time. This is particularly evident during the Affinity show when an audience member is selected to 'meet' a dolphin and also in the paid interactions in the pools behind the Dolphin Beach stadium, where the mostly larger offshore dolphins are kept. The dolphins are almost entirely out of the water for an extended period while the public pat, feed, 'play splash,' ask the animals to 'speak' and pose for photo opportunities. The dolphins are exposed to the full sun and their internal organs experience the pressure of the animals full out-of-water body weight, which can range between 150 and 650 kg.
- During the Affinity show, trainers hold onto the dolphins dorsal or pectoral fins and also use the dolphins rostrums to be pulled or propelled around the stadium pool, including being lifted out of the water onto the stage. The dolphins push or pull the entire weight of a trainer through the pressure of the water.
- Trainers stand on the dolphins rostrums when presenting a "rocket hop," where the dolphin's jaw supports the full force of the trainer's bodyweight, being propelled through the water in order to catapult the trainer into the air. *Image files supplied.* A sample of these can be seen here: https://www.youtube.com/watch?v=9znQ3FmMR6M

Sea World Says:

- During the office meeting with Sea World's Management in August 2016, our team questioned them directly regarding trainers standing on the dolphins. Trevor Long said that he understood changing opinions and *"we do not stand on dolphins anymore, we've cut that out of the show."*
- Sea World has removed 1 trick from the Affinity presentation where trainers were standing ("surfing") on dolphins backs. Trainers continue to stand on the dolphins rostrums for 'rocket hops' and to be launched onto the stage after being pushed across the pool.
- Whilst watching the show with Mr Long, we pointed out that the trainers were still standing on the dolphins rostrums when presenting 'rocket hops,' we asked why this remains in the show, Mr Long stated: *"Well we're still a show and we have got to try… and this is recreation and entertainment so I can understand other peoples, well your own views. But for me the animals enjoy it, they don't… I stopped all the riding on the back I thought that was gone… those animals can break away at any time, you know their only got their nose… if they don't wanna do it they don't have to do it you know. So as I said I accept your point of view and whether it may change in the future I don't know. At this point in time I gauge the reaction of the audience and the audience enjoy it."*

e. Documented numbers of dolphins displaying worn, missing and algae covered teeth.

This type of dental pathology is a common abnormal finding in captive cetaceans who frequently grind down and break their teeth on hard surfaces in their enclosures, metal gates, rock substrate, enrichment objects, or by excessive, repeated 'jaw-popping' and other behavioral abnormalities. Teeth that are worn down to the gum line may have exposed pulp cavities and are vulnerable to infection. - Heather D. Rally, D.V.M.

Dolphins are naturally inquisitive and will manipulate objects in their environment. The dolphin pools are void of any natural stimulus so they will repetitively manipulate or gnaw at solid objects in their pens, such as concrete structures, pylons, gates and fencing. Perhaps even the 'toys' provided to them as enrichment and used in interactions such as fully inflated basketballs regularly placed in their jaws may also cause dental damage.

Algae seen on dolphins teeth may be caused by:

Poor water quality due to high bio-loading — algae requires nutrients to bloom.

Dolphin's at Sea World cannot swim great distances or at speed so do not get normal water flow over their bodies.

Dolphin's are not manipulating their food. Usually when a dolphin catches a fish it would have to manipulate it so that the fish can be ingested head first to avoid spines. Appendix 7

<u>Supporting Information</u>

- A large number of dolphins in all 3 zones have been observed to have worn or missing teeth and in some cases, wear is to the gum lines.
- Algae is present on a number of dolphins teeth, mostly in the Dolphin Beach zone.
- The dolphins have no access to live fish and dead fish are thrown directly into their mouths

Sea World says:

- The inclusion of live fish is prohibited by legislation because it's cruel.
- Dolphins teeth are naturally worn down as they manipulate objects in their environment, *"in the way we use our hands."*
- *"They don't need to hunt for their food and they don't need to chew — there really isn't much of a need for teeth"* - Sea World employee.
- Sea World says teeth wear is from manipulation of their food and objects in their environment.

f. The lack of shade and shelter from inclement weather provided to the dolphins.

Because tanks are often painted a light or bright blue color (to increase visibility of the animals to spectators) and because enclosures typically lack shade, light is often reflected back at marine mammals in captivity (versus in the wild, where natural surfaces are rarely highly reflective). This results in captive marine mammals being exposed to higher levels of ultraviolet (UV) light than in nature. In addition, most marine mammals are fed by trainers standing at the side of their tanks, with the animals looking up (into the sun) for fish to drop into their mouths. This "stationing" posture is uniquely associated with captivity. As a result, captive marine mammals may suffer from eye lesions and infections and premature cateracts. - CAMMIC, Rose, N.A et al.

Exhibited Animals Protection Regulation 1995, Standards For Exhibiting Bottlenose Dolphins In New South Wales Clause 2.1.3 states: "appropriate shaded, covered or sheltered areas must be provided to protect the animals from adverse ambient conditions caused by weather, sunlight or artificial lighting, glare or other environmental factors."

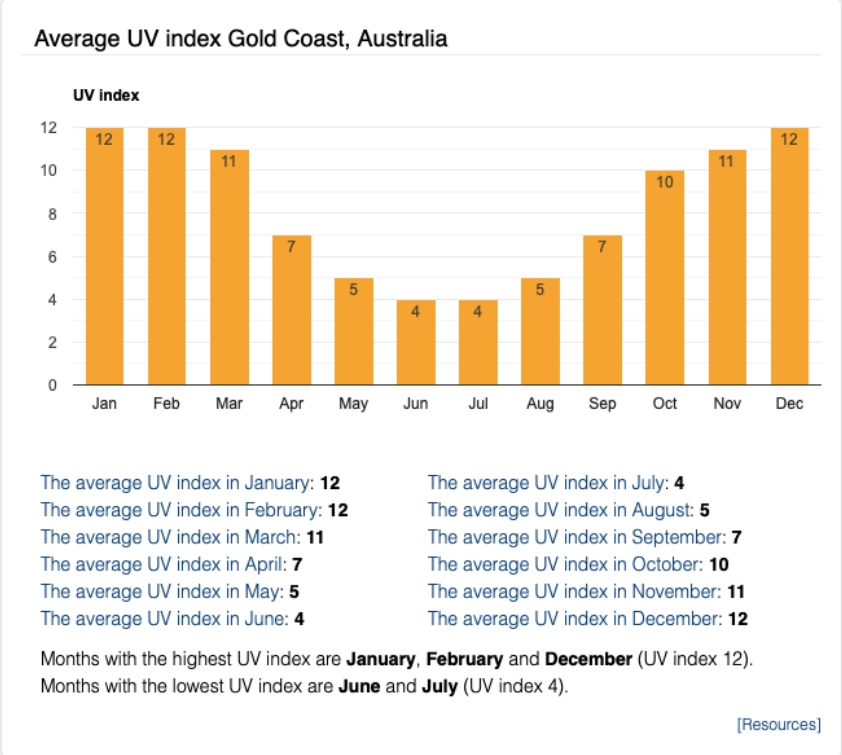
According to accepted UVR indexes, due to its light colouration, sand is one of the top UV reflective surfaces and water also reflects solar UVR[2]
Levels of reflective UVR:

Concrete (Footpath) = 8.2-12.0
Sand (Wet Beach) = 7.1
Sand (Dry Beach) 15.0-18.0

For Humans, The World Health Organisation recommends when the UV level reaches three or higher a combination of sun protection control measures including sun protective clothing, hat, sunglasses, sunscreen and shade may be needed to eliminate or minimise, so far as is reasonably practicable, exposure to solar UVR. The UV Index has five categories. When the UV Index is at three or above, sun protection should be used as the solar UVR is strong enough to damage the skin. (Figure 3)

[2] https://www.safeworkaustralia.gov.au/system/files/documents/1702/guide-exposure-solar-ultraviolet-radiation.pdf

Figure 3



Supporting Information

- There is little to no shade in all of the pools throughout Sea World at all times of the day, exposing them to a high risk of skin cancer, eye damage and sunburn.
- Sea World have erected sun shelters for trainers working with the animals but have not invested in any shelter for the dolphins.
- The dolphins appear to be the only animals in the park that have no designated shelter.
- There are some small spots of shade early morning and towards evening when UV rays are lower, however these areas are only in the shallow sand or rocky shores of the pools where the dolphins need to be almost entirely out of the water to utilise it.
- The shallow water in addition to the requirement for dolphins to be at or near the surface for activities means that the dolphins are exposed to extreme ultraviolet rays consistently.
- During interactions dolphins are required to be mostly in the shallowest parts of the pools, further exposing them to UV and reflected UV from the waters surface, surrounding dry sand and concrete.
- Conditioning to receive food from trainers also causes the dolphins to regularly have their heads out of the water 'begging.'
- An example of a severe sunburn scar can be seen on the dolphin Starbuck (usually residing in the Dolphin Bay pools) that occurred when he slid out onto the stadium pool stage and was not discovered by staff for some time.
- Sea World's new ride construction at the Sandy Shore zone has already removed a number of large trees that provided some little shade in the early mornings on the eastern rim of the zone. *Image files supplied.*
- There is no protection from inclement weather such as tropical high winds or hail. *Image files supplied*

Testimony:
An ex-employee stated that eye problems are constant and recurring at the park.
She said that a *"huge"* number of seals and dolphins were *"consistently getting eye drops"* and that she believed this was because of the water quality, chemicals, sunlight, lack of shade and that they were out of the water always training and they*"were getting cateracts."*

Sea World Says:

- Mitchell Leroy stated lack of shade is not an issue *"due to available water depth."* He also stated that *"UV doesn't permeate past 2m." and on another occasion "Sandy bottoms don't reflect like barren pools, UV only permeates to 2 meters"*
- *Cath Atkins (Vet Nurse) stated that in a lot of cases, when resting, most dolphins preferred to be in the warmth of the sun but there was shade available around jetty's, pontoons and foliage.*
- Sea World management says the dolphins enjoy unusual weather as it provides something *"new and novel."*

g. The dolphin's exposure to relentless and ever increasing noise, vibration and night lighting due to theme park activities, events and constructions and in particular to the (mostly rescued) animals kept in the Sandy Shores zone.

A growing body of research has found that exposure to excessive or unnatural levels of noise can affect a number of health and welfare parameters in cetaceans, including immune suppression, increased aggression, and premature hearing loss (Couquiaud, 2005). Indeed, captive dolphins who are exposed to acoustic insults are known to demonstrate physiological and behavioral indications of stress, such as an increase in circulating stress hormones and a refusal to perform or eat. Captive dolphins have even died because of severe acoustic disturbances -Couquiaud, 2005; Monreal-Pawlowsky et al., 2017.

Acoustic stress is a serious welfare concern for captive dolphins, who would use their sophisticated acoustic systems to communicate, navigate, hunt, and visualize their environment… Their aural anatomy and physiology is highly complex and exceptionally sensitive to sources of sound and vibration.- HD Rally et al.

Exhibited Animals Protection Regulation 1995, Standards For Exhibiting Bottlenose Dolphins In New South Wales Clause 2.1.5 a) states: "animals need protection from excessive noise." and Clause 2.1.5 c) states "attention should be paid to acoustic treatment of buildings and protection of animals from disturbing noise e.g. certain noises generated by mechanical systems and transmitted under water. Particular care must be taken during construction and maintenance work. If extraneous noise appears to be resulting in loss of animal appetite and condition, this problem must be corrected.

Sea World is an amusement park designed to provide fun and excitement to the paying public. As part of the guest experience a great amount of sound energy is generated and the animals in the park are continuously and unrelentingly subjected to an ever increasing level and range of disturbance.
The industry and Sea World management will typically claim that these noises are 'deflected' by the water surface (or 'muffled' by the water) and that the animals are underwater and therefore don't hear it. However the dolphins:
Perceive sound and vibration differently to how humans perceive it;
rostrum is used as a 'sound receptor,' i.e. their ears don't have to be above water, just the rostrum or part of it, for them to perceive these sounds clearly above the water;
spend the vast majority of their time at the waters surface and or with their heads out of the water, eg. during presentations and interactions, when being fed or waiting to be fed etc.

Supporting Information

- Dolphins in all zones are subject to acoustic stress however the Sandy Shores zone, where the majority of rescued dolphins reside is exposed to the greatest level of continuous and unrelenting noise and vibration of all the areas in the facility and is directly impacted by the new Atlantis thrill ride zone development. (Figures 4 & 6).
- All of the dolphins at Sea World, but in particular Sandy Shores dolphins are exposed to the following causes of anthropomorphic disturbance which includes sound, vibration and in the case of Carnivale and other night time events the addition of laser and other lighting:

i. Helicopters

There are 2 jet helicopters that operate from helipads approximately 148 m from the centre of the Sandy Shores dolphin area and within 220 m of the Vet Quarantine Centre.
They operate between 8:30am and 5:30pm however also accomodate flights outside of those hours, including night flights.
They each provide alternating 5 minute flights with no engine shutdown during the day.
The helicopters can fly past the southern (entrance end) of the park on take off and usually return via a loop around Sea World's eastern, northern and then western perimeters before landing approximately every 2.5 minutes.
The helicopter noise is constantly heard throughout the park.
Helicopters have been observed occasionally being "hot-fuelled" and we have seen staff allowing passengers to take photographs causing delays resulting in both helicopters being on adjacent helipad's concurrently thus compounding the noise they generate. *Files supplied.*

ii. Shows & Presentations

There are multiple shows and presentations throughout the day that are scheduled at intervals that enable maximum patron experience.
All park activities listed below use either speaker broadcasted music and dialogue or a combination of both and include the associated theatrical show noise eg. boats, jet skis, explosions and audience cheering and squealing etc:

9:00 am - Nara resort presentation, Dolphin Beach
10:15am - Seal Guardians, Seal Stadium
10:45am - Penguin Presentation
10:45am - Ray Reef Presentation
11:00am - Paw Patrol, Nickelodeon land stage
11:15am - Affinity, Dolphin Beach
12:00pm - Turtle Power Live Show, Dockside Tavern west step area
12:30pm - Our World of the dolphin, Sandy Shores
1:30pm - Thunder Lake Stunt Show
1:45pm - Paw Patrol, Nickelodeon land stage
2:30pm - Seal Guardians, Seal Stadium
3:00pm - Penguin Presentation
3:00pm - Ray Reef Presentation
3:30pm - Affinity, Dolphin Beach
4:15pm - Thunder Lake Stunt show

iii. Thrill rides

There are a number of thrill rides at the park with each in close proximity to the dolphin enclosures. Noise from ride mechanics and the public riding them, along with coaster compression and stretching vibrations also impact the dolphins exposed to rides such as the existing Sky flyer, Storm Coaster and Jet Rescue Coaster.

Sea World has recently announced and has begun construction of a new "Atlantis' development, adjacent to the Sandy Shores dolphin zone and incorporating 3 new thrill rides. (see further information at number vi)

Of extreme concern is the 'Vortex' ride which is immediately alongside the Sandy Shores dolphin pools. (Figure 5)

iv. Carnivale

Sound and laser light spectacular and other after hours/night time events

Please refer to previous extensive information and correspondence with Biosecurity (and previously supplied) regarding the Carnivale event. *Files Supplied.*

In addition to Carnivale and all scheduled events, presentations, interactions, rides and activities, Sea World also offer after-hours corporate events and activities such as dinners, weddings, television presentations and private dolphin interactions.

v. Filtration Noise

Noise from filtration systems can be heard throughout the park. At the Dolphin Bay area the filtration system is exceptionally loud and we believe would exceed a safe level even for humans.

There is no way of knowing how this noise affects the dolphins in their enclosures without a robust evaluation being undertaken.

During our August site visit we were also able to walk through the large filtration system alongside the Vet Quarantine Centre. Whilst there the noise was so loud we had to shout to hear each other talk. *Sound and image files supplied.*

"Persistent noise from water pumps and filtration machinery, if not dampened sufficiently, and any activity nearby that transmits vibrations through a tank's walls, such as construction or traffic, can increase stress and harm the welfare of these acoustically sensitive species." - CAMMIC, Rose, N.A et al.

Figure 4

Sea World online map. Observe the activities surrounding the Sandy Shores dolphins, pre Atlantis, marked with an x.

vi. The Atlantis Development

This new development is of extreme concern specifically with regard to the immediate welfare of the dolphins in the Sandy Shores pools.

Sea World's social media shows that the 'Vortex' ride construction alongside the dolphin pools is already underway.

The development area will also include a large wooden rollercoaster and an amphitheatre which will be used to introduce further presentations. (Figure 5)

The dolphins in this area will already be experiencing exposure to construction noise and vibration from the use of heavy machinery to clear the area.

Construction at the site will be ongoing until well into 2020.

Once constructed the dolphins will continue to be exposed to disturbance from ride operations, additional crowding and the risk of debris being dropped into the dolphin pools below.

The 'Vortex" appears to be a version of the 'wipeout' ride that was previously included at Dream World and is a particularly loud ride. https://www.youtube.com/watch?v=_Kmaoq27Ymc

- Sea World's maps, listed experiences as well as our data shows how inundated the dolphins are from compounded activity disturbance. We believe the acoustic stress placed on the dolphins in the Sandy Shores area is extreme. The construction and ongoing disturbance that the large scale new Atlantis development will bring to these dolphins, in our opinion demonstrates Sea Worlds wilful neglect of the animals in its care.
- Sea World also recently announced they would be expanding on their night time events.
- We are currently unable to find any information about what considerations were given to the dolphins when planning and constructing the new (temporary) 'Sky flyer' ride.
- We have also enquired with Gold Coast City Council, requesting information about planning applications for the Atlantis development to ascertain what, if any considerations have been given to the dolphins impacted by this development.
- A town planner explained that there are no requirements that Sea World report any 'de-construction' activities and that they have no project planning information.
- We have requested in the past that biosecurity ask Sea World management to undertake an acoustic assessment of noise at the park, specifically in regard to the filtration noise and Carnivale event to no avail.
- We have also requested clinical assessments to determine the level of stress experienced by the dolphins at the park, to which they advise:
  "Whilst the Exhibited Animals Act 2015 requires an authority holder to submit management plans on how they are to exhibit wildlife, the Act relies on the authority holder, under an exhibition and dealing obligation, to take all reasonable measures to prevent or minimise the relevant risks and adverse effects associated with exhibiting and dealing with exhibited animals." and *"I can advise that the undertaking of clinical or biological assessments to determine any effects of Sea World Carnivale would fall within the definition of using an animal for scientific purposes as defined under the ACPA and conducting these activities without the necessary approvals would constitute an offence under ACPA."* *Files supplied.*

- We question why Sea World would be required to obtain a permit to evaluate the level of stress in its dolphins when:

  Sea World says their animals are their first priority;
  we believe that the dolphins are already being clinically and biologically assessed for stress levels as part of an industry-led 3 year welfare assessment. Mr Long stated: *"We have also agreed to work with six other large zoological facilities in the US and HK in a specific dolphin welfare study that will allow us to hopefully appreciate the actual state of welfare of our animals."* Mr Long also mentioned the study when we visited in February 2017, saying, *"... we've actually signed up now…;"*data being collected for this study includes: "cytology slides, fecal samples, blood samples, tag data (bio-logging devices), behavioural video;
  Sea World regularly take blood samples from their dolphins so we presume are already permitted to collect and scientifically assess their animals biological material;
  Sea World are able to take saliva swabs which is a relatively non-invasive procedure. Cortisol can be measured in a number of tissues and secretions such as serum or plasma, saliva, milk, ocular secretions, urine and faeces Repeated daily collection of dolphin saliva can help to understand how acoustic disturbances can provoke changes in the animals internal stability.

Figure 5

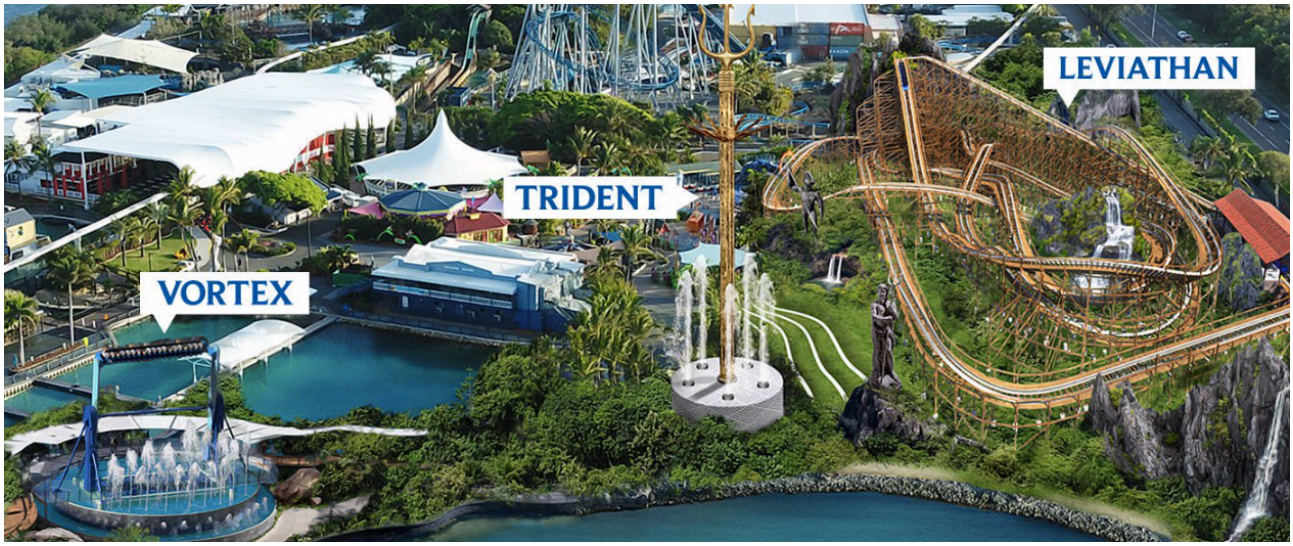
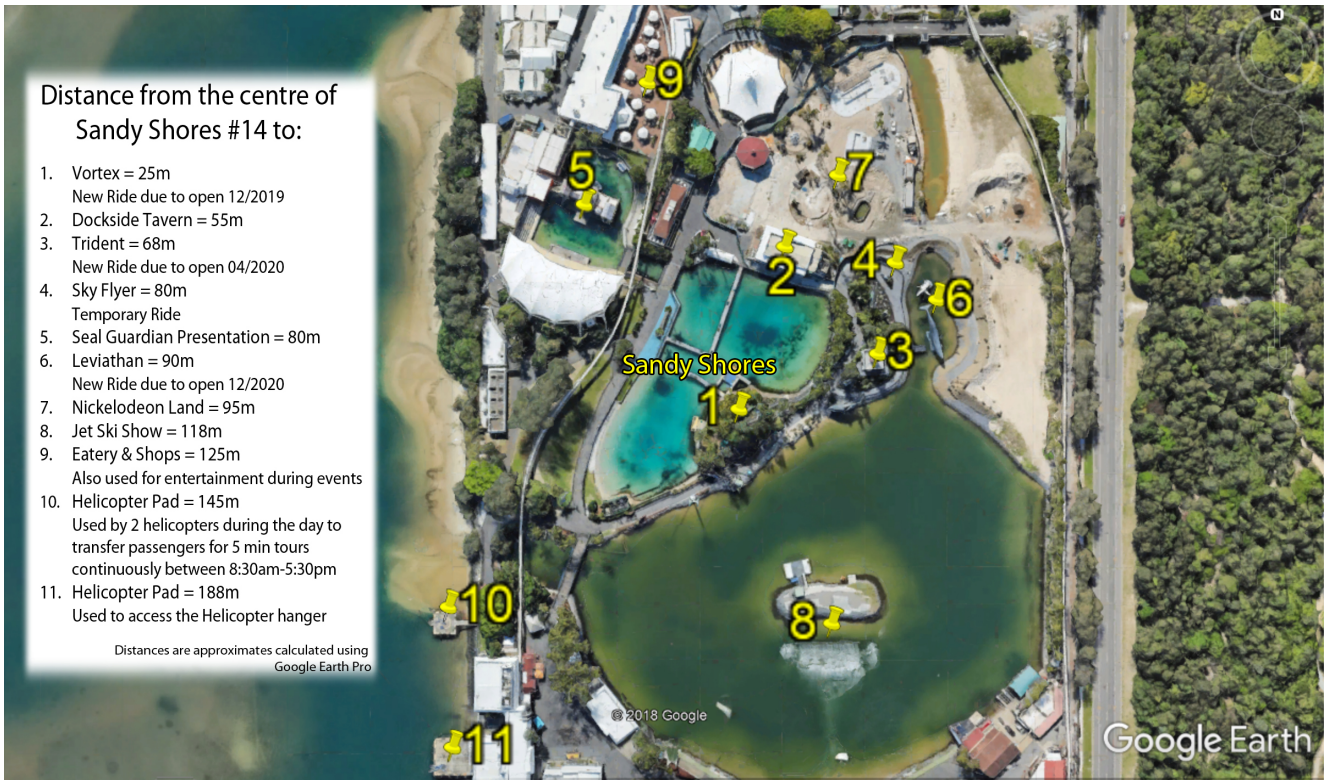


Figure 6



- A research study of stress responses in 5 captive bottlenose dolphins published in 2017 found that, “during the [sic] day when construction works were carried out, all five dolphins showed increased salivary cortisol concentrations (p=0.0004); this was more evident in the breeding male who showed a 300-fold increase of cortisol level in the afternoon (3.119 ng cortisol/ml saliva; p=0.004). The assay detected an acute increase in salivary cortisol induced by vibrations and noise in the dolphinarium. For each animal, samples were obtained four times per day for three regular days, as well as for the day the facility underwent a structural check-up. This consisted in drilling of the walls surrounding the different pools and the facility itself at regular intervals over a 10-hour span, starting at 08.00 and finishing at 18.00.[3]
- Sea World and the industry compare dolphins in human care to keeping pets or having a dog in a back yard. Dogs have been domesticated through selective breeding for thousands of years. Their genetic divergence from wolves was estimated to have taken place about 20 to 40 thousand years ago. Dolphins, on the other hand, are wild animals. They were born to be wild and have both physical and psychological needs that can never be met in a captive environment.
- It might be considered that a large dog confined for its life in a small pen and provided no shelter from the weather or sun, exposed to loud, unnatural and unexpected sounds day and night, with no where to retreat or escape, not even taken for a walk would constitute a serious welfare concern.
- Sea World argues that most of its dolphins are born into the amusement park environment so are adapted to it. However, Sea World also take in rescued wild dolphins who have never been exposed to this life. We believe Sea World currently has at least 6 rescued dolphins residing in the Sandy Shores zone — the most activity exposed area of the entire park.

Sea World says:

- Mr Long refers to a dolphin in captivity as being the same as having a family pet *“like a dog in a back yard.” He says “the dolphins don’t notice the noise.”* He says *“its no different to a person living near an airport.”* Some statements made by Mr Long include:*”Just because a dog has been domesticated for a long period of time, doesn’t make any difference.”“These animals grow up in the environment, they enjoy their environment.”“Everything we do is underpinned by animal welfare”“We are answerable to shareholders, therefore profits are everything – this is a commercial operation, absolutely commercial"*
- Mr Long says *“We know that if we make a loud noise in the pool, because we’re doing some construction work at the moment, we make a loud noise in the pool the animals will move away from it or they’ll react to it.” Files provided.*
- When Curator Mitchell Leroy was asked about the noise from shows impacting the animals his response was *‘Ive stuck my head in the water and its fine”*
- Sea World’s management say they “take bloods regularly” and have the ability to do blood straight away because *“they require it for their rescues.”*

[3]Daily salivary cortisol levels in response to stress factors in captive common bottlenose dolphins (Tursiops truncatus): a potential welfare indicator. T. Monreal-Pawlowsky, A. Carbajal,O. Tallo-Parra, M. Sabés-Alsina, L. Monclús, J. Almunia, H. Fernández-Bellon,M. Lopez-Bejar

h. The inability of dolphins to go “off display” or retreat from disturbance.

..unlike many other species kept at zoos and aquaria, captive marine mammals often have no provision to go “off display” (to retire to an area away from the main exhibit area, out of view of the public) or avoid/escape from other animals in the tank at will; if such retreat space exists, they can only access it when handlers open gates or doors. This absence of retreat space has led to serious aggressive interactions between animals, in at least some cases resulting in serious injury and even death.- CAMMIC, Rose, N.A et al.

Supporting Information

- In both the Sandy Shores and Dolphin Bay zones the dolphins are on permanent public display, there is no area available to the dolphins in these zones to go ‘off-display’ or that allows them the option to flee from disturbance. As discussed the animals at Sandy Shores are permanently exposed to the highest levels of noise and activities of the park.
- For the majority of time the interconnecting gates within all dolphin zones are closed so dolphins are not even able to retreat to another area of their zone.
- The Dolphin Beach zone, although still used for interactions, shows and park activities, has the potential to provide dolphins a more private or ‘off-display’ opportunity due to the quieter nature of the northern end of the facility, adjacent to Nara resort. General admission to this area is prohibited and access to these pools is controlled via lockable gates.

Sea World Says:

- Sea World management state they give their animals choice. Sea World makes a point of advising the public that their Polar Bears are able to go ‘off-display.’ The dolphins do not have this option. *"we give our animals choices and if they’re not on exhibit they want to be back in so we just tell the people that.”*

i. Incidences of aggression and abnormal (stereotypical) behaviours

While all species of marine mammals held in captivity (with the exception of sirenians) are predators, none are allowed to exercise that part of their behavioral repertoire that is related to hunting and foraging. For all captive marine mammals, this means boredom is a serious concern, but for display-only animals, such as polar bears and most seals, boredom can be unremitting. Stereotyped behaviors, severe aggression toward conspecifics and humans, and other behavioral problems frequently arise in predators denied their natural foraging behavior. Though a degree of aggression is of course natural, in a captive setting, aggression can be escalated due to artificial social groupings and spatial constraints that prevent subordinate animals from escaping aggressive interactions. - H.D.Rally et al.

Stereotypical behaviour is well documented in Zoos and Aquaria and is usually an indicator of stress and or boredom, is a repetitive habit that has no goal or function. Some examples include: vomiting, head bobbing, pacing/circling, comotose-like states, self mutilation, biting on gates and bars, unnatural body positioning, continuous rubbing on objects and tongue playing.
Aggression in captivity is often caused by frustration, including factors previously mentioned, incompatible groupings of animals and/or species and large animals confined in small spaces.
Aggression between dolphins causes stress and can result in injury and even death.
Aggression, between dolphins does occur in the wild and can be considered natural behaviour however within the confines of their managed amusement park lives, where stress, anxiety, boredom and frustration may be extreme, the animals are unable to flee from aggressors.

Supporting Information

- Sea World house mixed species in the Dolphin Bay area where larger offshore bottlenose dolphins are kept in enclosures with smaller inshore species.
- Aggression has been observed and recorded first hand between 'Starbuck' and 'Cohen' at Dolphin Bay. *Video file supplied.*
- Many of the dolphins at Sea World have scarring and evidence of rake marks particularly in Dolphin Bay.
- A number of abnormal behaviours have been observed and documented during our site visits:
- Tallullah (Sandy Shores) observed on multiple occasions sitting vertically with her upper body out of the water, her tail curled under her, appearing to be sitting on her tail.
- Tallulah observed rubbing continuously on a gate strap and under an enclosure jetty.
- Unknown dolphin (Sandy Shores) observed multiple times upside-down with its belly fully extended out of the water in a head stand-like position.
- Various dolphins (Sandy Shores) observed "tongue rolling' or (biting) described as flipping their tongues and catching it in their teeth.**
  Unknown dolphin (Sandy Shores) repetitively lifting a platform with its head.
  Dolphins (Dolphin Beach) 'banging' on gates.
  Dolphins (Dolphin Beach) rubbing on concrete bollards.
  Dolphin (Dolphin Beach) lying with its tail in the shallow sand edge using its tail fluke to repetitively 'scoop' the sand and flick it over its body.
- Teeth wear, rostrum and fluke injuries are likely a result of stereotypical behaviours. Appendix 8

Right To Information:
Sea World management plans have no information specific to curbing abnormal or repetitive behaviour.
They do however specifically address pre cursors to aggression and how animal handlers should respond to them.
Management strategies are with regard to the protection of humans not dolphins.

Sea World Management plans state:
"Whenever a human has direct access to an animal there is always the potential for an event to happen that could elicit an aggressive response from the animal. This could be from direct involvement by the human or displaced aggression after some event between two or more animals. Sea World staff are trained to be observant of their animals and their changing moods and behaviours and to ensure that interactive programs always proceed when there is no obvious sign that a potentially aggressive event is imminent. Staff are trained to identify the precursors to aggression, the behaviours an animal may exhibit before they become aggressive, and If identified the staff use training methods to redirect the animal's focus."

"Aggressive behaviour in marine mammals may be displayed in many different ways and may be directed towards other animals, trainers or guests within their environment. A number of causes may elicit aggression such as:

- *a response to threats (from other animals or trainers);*
- *illness;*
- *Frustration (resulting from training sessions or application of LRS or time-outs).*

Pre-cursors
Observe and recognise any pre-cursors, if these signs go unrecognised, a situation can escalate to aggression causing bodily harm to other animals, trainers or guests.
Pre-cursor signs may include (but are not limited to):
shaking of head from side to side;
blow bubbles;
vocalizing;
'jaw popping'; .
eyes change (look unfocused or squinty);
rubbing of body along trainer/guest;
mouth open;
body posturing;
sink;
may change focus.
Aggression
Some animals display very little 'pre-cursor' signs and aggression may be observed with little notice
Aggression may include
bite;
ramming with rostrum or body;
speed swimming at animal, trainer or guest;
tail swipe directed at animal, trainer or guest "

Sea World Says:
- Sea World management told us that all animals and humans demonstrate stereotypical behaviours, they are *"a natural stress coping mechanism."*
- Sea World management say *"their animals are not stressed."*
- **Trainers say this is a trained behaviour that originated with the ex marineland animals and that other dolphins now mimic this behaviour. However the marineland animals reside in the dolphin Bay zone and yet more recently rescued animals such as Cliffy who resides in the Sandy Shores zone have displayed this behaviour and have never been housed with the marineland dolphins. Sea World have been documented asking dolphins to do this behaviour in their presentations.

7. Overarching factors impacting the well being of the dolphins

Space

In any design of a dolphinarium or aquarium, satisfying the needs of the visiting public and the facility's budget comes before meeting the needs of the animals. If every measure were taken to create comfortable, safe, and appropriate conditions, then the size, depth, shape, surroundings, props, colors, and textures of concrete enclosures would be different from those seen now. In addition, noisy and disruptive activities and structures (such as fireworks displays, musical events, and roller coasters), all too commonly placed adjacent to or near marine mammal enclosures at marine theme parks, would be relocated to avoid disruption to marine mammals exposed to them daily and in some cases intermittently throughout the day.- HD Rally et al.

In the wild they travel between 60 and 225 km (35 to 140 miles) in a day, reach speeds as high as 50km (30 miles) an hour, and dive from 500 to 1,000 m (1,640 to 3,280 ft) deep. These cetaceans are highly intelligent and socially and behaviorally complex.Their perception of the world is largely acoustic, a difference in mode of perception that makes it virtually impossible for humans to imagine what they "see." Even in the largest facilities, a cetacean's room to move is decreased enormously, allowing the animal access to less than one ten-thousandth of 1 percent of its normal habitat size..- CAMMIC, Rose, N.A et al.

Exhibited Animals Protection Regulation 1995, Standards For Exhibiting Bottlenose Dolphins In New South Wales Clause 2.4.4 d) states "minimum surface area for each animal will be 49 square metres with 49 square metres to be added for every additional animal held."

- Sea World Gold Coast promotes its dolphin enclosures as naturalistic, salt water, interconnecting sand bottom lagoon systems, where the animals have choice and reside in some of the largest captive dolphin habitats in the world.
- The pool areas present a natural and tropical facade of sandy lagoons with sloping beaches, rocky 'sea walls' and scattered palm trees, this environment is perceived to be idyllic by Human standards. The reality is quite different for the animals who reside in the pools permanently.
- The pool sizes may appear large however the actual usable swimming spaces are smaller than they appear and this is true for every pool in all three dolphin zones at the park.
- The deepest point of all the pools in the entire facility is 7 meters, which is in the centre of the stadium pool at Dolphin Beach. All other enclosures are less than 7 meters. The Sandy Shores deepest centre point, Sea World says is "about 3-4m." *Files supplied.*

Choice

- Dolphin Beach, Dolphin Bay and Sandy Shores are 3 distinct and completely seperate (non inter-connecting) Dolphin zones.
- Dolphins are only moved between these seperate zones when park operations, breeding and veterinary care requires it.
- Each zone has a number of pools subdivided by pylon fences and gates that allow for park staff to separate or move animals for animal management and to meet public experience demands.
- Management plans state: *"Although subdivided into different pools by pylon fences or swim-throughs, the pools at Sea World allows the animals to remain in auditory and/or visual contact with other dolphins in the same water system. This means that animals can be physically separated without being isolated from their social group."*

Supporting Information

- On every occasion we visited the park we observed and documented all gates to be mostly closed at all times of the day other than when specifically moving animals for public interactions, presentations or other management purposes.

  Example: Dolphin Beach management plans state there are *"4 distinct pools,"* in this zone. The stadium pool is one entire enclosure consisting of the performance area and a shallow space adjacent at <2 m depth. All 9 dolphins appear to reside in only 3 of the pools (including the stadium area) numbered 1, 2 & 4. Pool 3 is used to heard dolphins into a smaller area to catch them for medical procedures or to move them.* We believe the male Kiama mostly resides separated in pool 4, therefore 7-8 dolphins usually reside in pools 1 and 2. Additionally, when Dusty the dolphin calf was alive (for at least 5 months) and residing in pool 2 he was housed with his mother Jinx and his aunt Gemma. We believe Kiama was residing in pool 4, possibly with Evie, so presume the remaining 5-6 dolphins were permanently separated and housed in stadium pool 1 for as long as Dusty survived. (Figure 7)

- *Pool 3: This area was designed as a medical pool, dolphins will be herded into this smaller area to catch them for medical procedures or treatment or to remove them for transport to the Vet Quarantine Centre.

Sea World says:

- Sea World management tells us *"we give our animals choices"* and that they are rotated through activities and allowed 1 day off per week.
- If dolphins truly had choice, staff would be unable to control instances of dolphin aggression, which could cause serious injury risk and dolphin death and additionally breeding (if not on contraception) would be random and uncontrolled. Breeding is limited by Queensland government permit.
- At our August 2016 site visit, Mr Long told us during our tour of the Dolphin Beach pools, that the gates between pools are *"usually open."* However two of our observers whilst walking above the gate between pools 2 and 4 heard and felt a dolphin bang against the closed gate.
- When asked why dolphins couldn't be rotated through different zones, a trainer said, *"if they moved animals from pool to pool that it would cause a lot of stress, they would get confused being in a different pool."*
- Sea World management also told us that you cant move dolphins from one zone to another because of the different species, water depths and temperatures. For example dolphin beach is chilled for the offshore dolphins. However our data demonstrates that dolphins are regularly moved between zones for presentations and breeding purposes.

Water Quality

Chlorine required for hygiene precludes live plants and fish in the tank and can cause skin and eye complications for marine mammals.- CAMMIC, Rose, N.A et al.

- Sea World's pools are marketed as the largest natural salt water lagoons in the world. The Nara resort presentation tells its patrons: *"Now our pool here this morning is actually the largest man made lagoon in the world. So it's a nice big natural environment for these animals to live in and the water that the pool is filled with comes from the Broadwater." "So we filter the water in from the Broadwater it goes through our filtration system and straight into the pools."*
- There are a number of man made lagoon systems that provide captive dolphin experiences throughout the world that far exceed the space provided to the dolphins at Sea World. For example Atlantis Resort Dolphin Cay in Nassau which has an 11acre man made dolphin lagoon.
- Additionally the pools may be 'large' but this not take into consideration the ratio of area per dolphin housed within it.
- The majority of water is not from the Broadwater.

Supporting Information

- There are 3 seperate filtration systems at Sea World.
- The filtration system in the Dolphin Beach area is a 'semi-closed' system and only pulls small 'top-up' amounts of water from the Broadwater. We are unsure if this is the same for the other 2 systems.
- All dolphin zones are chemically treated using a combination of Chlorine Dioxide (Sandy Shores), Sodium Hypochlorite and Ozone (Dolphin Beach and Dolphin Bay).
- Large amounts of salt are also added to the pools.
- Storm water run-off can enter the dolphin pools.
- The Sandy Shores zone shares its water with the seal show pools increasing the bio-load in their water.
- The Dolphin Bay Pools also share their water system with the adjacent seal pools.
- Dolphins in all areas are exposed to human disease, infections, sunscreens, perfumes, human excretions, seagull faeces and as well as seal excretion at Sandy shores & Dolphin Bay.
- Pool 15 (Sandy Shores) we approximate can have up to 16 people including 2 trainers, 2 photographers and 12 public participants in this enclosure with 2 dolphins (usually Cliffy and Howie) at multiple times throughout the day.
- Algae on dolphin's teeth may be an indicator of poor water quality due to heavy bio-loading.
- Information obtained through Right To Information does include some water test results however those documents are illegible.

Testimony:
An ex-employee said that if you saw some of the back house pools, they were *"swimming around in a cesspit of fecal matter."* There would be *"20-30cm of algae*" and the *"whole bottom of the pool would be green and brown."*
She described how the vet would routinely instruct staff to give the animals eyedrops, they would have cataracts and that she believed the eye problems were a result of the poor water quality compounded by animals being out of the water exposed to sunlight and little shade.

Sea World says:

- Trevor Long says *"water is my biggest problem"*
- He also stated that real kelp would not survive in the pools because of the ozone used for disinfection. He says whatever oxidant you use (Chlorine or Ozone) it oxidises the Bromide Iron, and that bromine is a very powerful disinfectant.
- Mr Long also told us *"We add 'tons and tons of salt to the pools because "you get fresh water induction of rain" and "storm water from everywhere comes into here."*

Breeding

Individuals from populations that could not breed together in the wild due to geographic separation regularly have offspring in captivity. Even worse, marine mammals belonging to completely different species have been bred together to produce hybrids, which could not be released and have absolutely no value in terms of species conservation. Most captive-breeding programs simply ensure a supply of animals for display or trade, creating in many cases a growing number of surplus animals of questionable genetic backgrounds. These animals are poor candidates for release into the wild or, for that matter, future breeding efforts, and face uncertain futures at best. - CAMMIC, Rose, N.A et al.

- There is little information publicly available regarding Sea Worlds 'Managed Breeding Program' or its success rate. All attempts to learn more about this program either directly from Sea World or indirectly through our research and Right To Information requests have demonstrated a clear lack of transparency and reporting. The information that has been forthcoming from Sea World or that we have been able to find regarding breeding practices at the park has been minimal.
- Sea World management states they have a breeding management program and do not artificially inseminate its dolphins.
- Historically captive dolphin facilities were known to breed hybrid dolphins however this practice was frowned upon by the industry and scientific community.
- Hybrid animals cannot be released to the wild so serve no true conservation purpose.
- Sea World currently has a number of 'left-over' hybrid dolphins in its collection.
- Sea World states it breeds for conservation purposes however the bottlenose dolphin is a species not considered threatened.
- Sea World Management states they will never release their animals to the wild.
- Sea World management states that they need to breed their females for health purposes.

Supporting Information

- Repeated requests for a current inventory of the dolphins at Sea World Gold Coast have been refused.
- Sea World are not accountable nor are they required to provide to any authority their animal breeding, births and deaths information as far as we have been able to ascertain.

- Ceta Base, the non-profit and public online captive cetacean inventory, who's information is presented with a focus on un-biased data, filed a request with Sea World management for information about their current collection of dolphins. The data requested was: dolphin's names, sex, captured vs. born vs. rescue/rehab, date of acquisition and dam/sire of the animals born at Sea World Gold Coast. Sea Word would not provide this information to Ceta Base despite its own employees also utilising this database when required.
- Discussions with Sea World Management demonstrate that hybrid breeding may be re-introduced.
- The following information regarding 'semen collection' was obtained from the International Marine Animal Trainers Association (IMATA) quarterly magazine "Soundings":

- 2006, Q1 (submitted November 15, 2005) "Training has started for semen collection on the dolphins."
- 2006, Q2 (submitted February 15, 2006) Gold Coast, QUEENSLAND "The staff has been collecting semen samples from the male bottlenose stock in anticipation for future artificial insemination projects."

- The following was also extracted from an IMATA publication:

- 2002, Q3 (submitted May 15, 2002) "Queensland Fertility Group and the University of Queensland are working on a project for assistive reproduction. The goal is to improve genetic diversity by using genetic material retrieved either from the wild or other captive populations."

Figure 7

Presumed usual residence of dolphins at Dolphin Beach whilst 'Dusty' was alive.

Right To Information:

- Sea Worlds's Veterinary Quarantine Centre-Dolphin Behavioural/Environmental Enrichment Program Policy States that behaviour training includes 'Artificial Insemination Training.' *File*s *Provided*
- Animals known to have serious genetic health defects, eg. lymphoma have been used for breeding purposes*. Files Provided.*
- Sea World breeds and controls (by both chemical birth control and physical separation) the breeding of its dolphins utilising programmed genetic recommendations to ensure the best outcome for its park operations and to achieve genetic diversity ensuring the longevity of its business. *"Sea World, in consultation with ZAA coordinates a controlled breeding program where breeding recommendations are providec via the Population Management tool kmown as PM2000. PM2000 software package provides a suite of tools for genetic and demographic analysis and management of pedigreed animal populations (a 'studbook').By following these recommenclations Sea Word aims to ensure genetic diversity within its population for these species. Should breeding not be recommended for a particular female at a given time Sea World can achieve this by either physically separating male and female animals or by administration of a pregnancy prophylactic such as Ready serve which is an oral Progestagn."*
- Sea World are permitted to be take biological material from deceased stranded wild dolphins and dolphins from other captive institutions for the purpose of maintaining diversity of genetic stock at the park. One of the purposes listed on the permit states: *"To provide a means of increasing the genetic diversity of captive cetacean species in Australian collections without taking live animals from the wild." Files provided*

Sea World Says:

- Trevor Long says *"We do not use Artificial Insemination" "Theres no need at this point in time to do AI"*
- When asked if Sea World has any hybrid dolphins Trevor Long stated that they do. He said going back to the 80's and 90's *"things weren't as professional."* He said they stopped breeding hybrids because *"we shouldn't be doing this".*
- Mr Long stated that they *"would probably go back to breeding Hybrids"* because their animals would never be released to the wild and they would *"need to for the longevity of the park."*
- Sea World Management (Veterinary Chief - David Blyde and Curator - Mitchell Leroy both told us that breeding is required for dolphin health. When asked directly about this claim, Dr Blyde said that mammals have reproductive health issues such as endometriosis, and ovarian tumours if they don't breed by a certain age. When questioned further about this , he also said there was no work (or literature) on this for dolphins, so they are just *"extrapolating"* that this would be the case for them.
- We posed the question regarding the need to breed dolphins for health to colleagues and have included in our appendices responses from both Dr Heather Rally D.V.M (PETA) and Dr Miriam Martinez, Veterinarian (FAADA). Files provided.

Births and Deaths

A species that does reproduce in a zoo or aquarium is not necessarily thriving or even being provided a minimally adequate environment. In addition, research has found that captive-bred animals generally have lower reproductive success than wild-caught captive animals, regardless of facility or species.

The failure of captive dolphins in dolphinaria to definitively exhibit a higher survival rate than in the wild, despite 80-plus years of maintaining this species in captivity, disputes the public display industry's oft-stated contention that captivity enhances survival by keeping animals safe from predators, parasites, and pollution and by providing animals with regular feeding and ever-improving veterinary care.

Causes of death for captive-born calves include lack of maternal skill or failure to bond properly between mother and newborn, lack of proper fetal development, and abnormal aggression from other animals in artificial social environments and confined spaces. - CAMMIC, Rose, N.A et al.

- Historically Sea World voluntarily reported its dolphin information to the United States National Oceanic and Atmospheric Administration (NOAA). It is not known when or why Sea World stopped.
- Information available from that time shows a concerning record of deaths at the facility, however since then there has been no publicly available information that demonstrates breeding success, pregnancies, births, death rates and causes of deaths have improved.
- The inventory published by Ceta Base holds some historical and current information for Sea World Gold Coast however the information is incomplete due to a lack of regulatory reporting of this type of data.
- Sea World appears to be completely autonomous with regard to its breeding activities and its transparency surrounding the pregnancies, births and deaths of its dolphins, nor is any detailed information required to be reported.
- When Sea World staff and management are asked how many dolphins are at the park the answer is always "about 30."

Supporting Information

- Historically available records show a large number dolphin pregnancies, births and deaths at Sea World and a disturbing range of recorded reasons for death. *Files provided.*
- Documents obtained through Right To Information (from the early 1970's until recent years) provide record of only 2 dolphin death reports.
- We have directly requested Sea World management provide information regarding specific dolphin pregnancies, births and deaths at the park however they refer us to Biosecurity within the Department of Agriculture and Fisheries who they say holds this information.
- Extensive correspondence with the department and Right To Information documents demonstrate that Sea World do not report this information to DAF, nor do DAF hold this information. *Files provided.*
- When specifically requesting information from DAF about the death of a dolphin calf named Dusty who was born on 7 December 2016 and who died some time between April and December 2017*, DAF stated "the Department cannot provide you with any specific detail regarding a juvenile dolphin born at Sea World in 2016."

  **Confirmed via telephone call to Sea World Ticket enquiry line.*

- *We have also been unable to obtain any information about 2 failed pregnancies. Gemma and Sunnie were both due to give birth the same year Dusty died. (Further reading about Dusty, Gemma and Sunnie)*

Sea World Says:
- The Department of Agriculture and Fisheries (DAF) holds this information.
- *"We provide all of our collection data, births deaths and management plan,"* and that they *"provide all of their data "by law to that authority."*

Stress

Stress has been recognized and discussed in this report as a factor that can severely affect the health of captive wildlife,,including marine mammals. Stress in mammals can manifest in many ways, including weight loss, lack of appetite, anti-social behavior, reduced calving and reproductive success, arteriosclerosis (hardening of the arteries), stomach ulcers, changes in blood cell counts, increased susceptibility to diseases (reduced immune response), and even death. Short-term acute stress will occur as the result of pursuit, confinement, sudden loss or change in social relationships, and physical handling experienced during capture or the transport process. Long-term chronic stress would result once an animal is permanently confined in captivity.- CAMMIC, Rose, N.A et al.

- We consider the entire body of information provided in this document is evidence of the stressful environment that the dolphins at Sea World Gold Coast have no choice but to endure.
- The welfare concerns we have documented are intrinsically linked with the level and indications of stressed dolphins at the facility.

Testimony:
- An ex Sea World employee told us that they used to put medication in the animals food every day.
- She also stated that the problems weren't healing. She stated *"at the end of the day their living conditions, the stress of all that they're dealing with, so their immune systems are compromised and the environment they're in. Its not a natural, its not natural."*

Sea World Says:
- *Sea World management told us that all animals and humans demonstrate stereotypical behaviours, they are "a natural stress coping mechanism."*
- *Sea World management say "their animals are not stressed."*

Autonomy, lack of accountability.

Sea World management states *"we are an accredited zoological facility with the Australian Zoo and Aquarium Association."*

Zoos and Aquariums are responsible for their own welfare standards through the Zoos and Aquarium Association accreditation process. This accreditation was established by and is effectively assessed by itself. The accreditation assessment at Sea World takes place every 3 years.

- Trevor Long says he doesn't believe we have got *'our accreditation'* right and that it has been *"watered down"* due to lack of funding. He also stated that he thought there *should* be 2 people over 3 days to go over everything but this doesn't occur.
- Sea World management states *"We are licensed under QLD Government Bio-Security to whom we are responsible."*
- Sea World management refuse to provide information about their animals and instead advise that information is available from Biosecurity within the Department of Agriculture and Fisheries (DAF) and that they provide their *"collection data, births deaths and management plan, all of their data by law"* to that authority.
- Documents obtained through Right To Information demonstrate that Sea World are only required to provide animal management plans and the number of dolphins in stock.
- DAF States, "*Sea World must maintain its dolphin population within the approved authority conditions; however it is not required to advise the Department of births and deaths of dolphins.Under the Exhibited Animals Regulation 2016 an authority holder must keep records of changes in population numbers, but is not required to provide records unless requested to do so." Files provided*.
- DAF has the authority to request that Sea World provide information to them as demonstrated in our Right To Information documents however when we have lodged complaints or requested information from Sea World through DAF we are advised that the Department cannot provide us with any specific detail.
- It is difficult to understand where the accountability lies when the Queensland Government, charged with responsibility for permitting Sea Worlds licences, relies on Sea World Gold Coast itself to provide the information, in order to ascertain if there are any adverse impacts to the animals in its care. And Sea World tell the public that DAF holds all of their information about that care in any case.

8. Next steps, suggestions for RSPCA

We have learned through our site visits and experience of Sea World staff and management that, on the surface, Sea World Gold Coast appears to provide a reasonable environment and expert care of its dolphins. We don't doubt that Sea World staff care about the animals and we appreciate the time we have been provided to visit and discuss the issues with them. However Sea World management and staff are well versed in delivering persuasive arguments about the level of education and inspiration they provide to the public, that Sea World exists to protect and conserve these animals for future generations. Sea World management may believe this to be true but our concern is for the welfare of the animals who continue to be bred and rescued into this unnatural, unhealthy and exploitative situation.

Our suggestions for next steps would be that RSPCA QLD:

Redacted Public Copy

9. Contacts

Redacted Public Copy

10. Appendices

Appendix 1

Child touching dolphins injured rostrum. SWGC February 2017. S Taylor

Child touching dolphins injured tail fluke. SWGC February 2017. S Taylor

Injured rostrum in trainers hands during public interaction session at SWGC February 2017. I. N. Visser

Girl enters water with bare feet, no hygiene protocols observed, SWGC February 2017. Image supplied.

Appendix 2

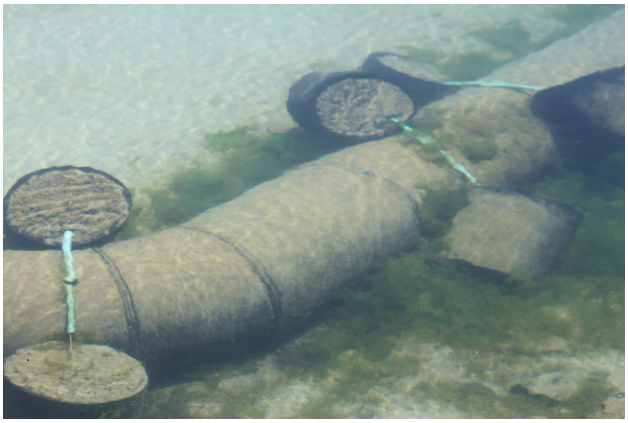
Dolphin Interaction - Participant wearing jewellery at SWGC February 2017. I.N.Visser

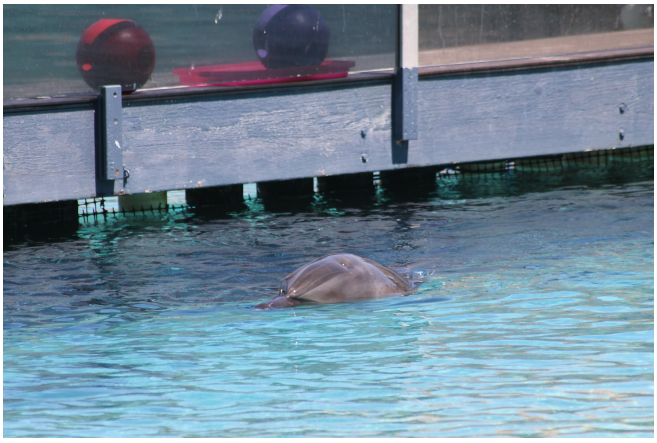
Young child in water with 2 dolphins at SWGC November 2017. S Taylor

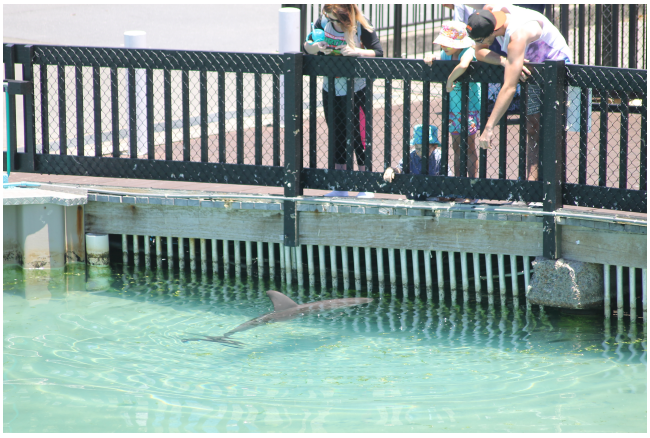
Trainer looking away from dolphins whilst young children are in the water at SWGC November 2017. S. Taylor

Appendix 4

Objects in SWGC Pools. Various supplied.

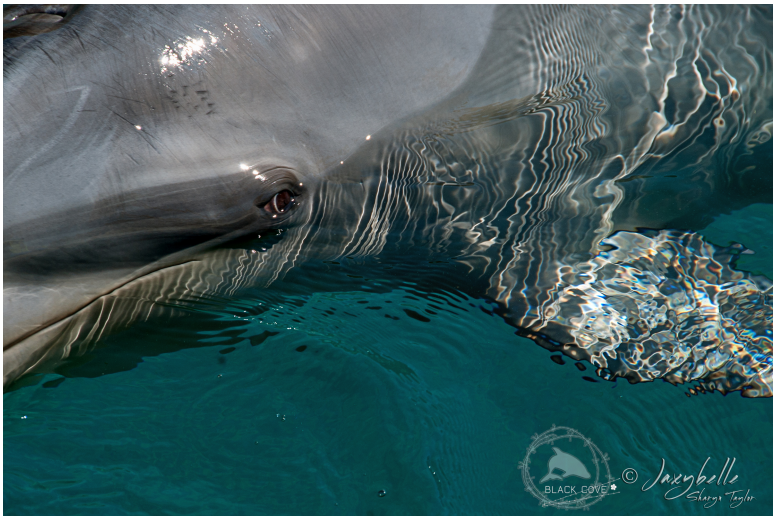






Appendix 5

Rostrum and other wounds on SWGC dolphins. Various supplied.



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TOP POSTS
#seaworldaus
madimarr22 · Follow
Sea World - Gold Coast, Australia
madimarr22 It's not every day you get to hang out with Dolphins! They're such beautiful animals! 🐬😍
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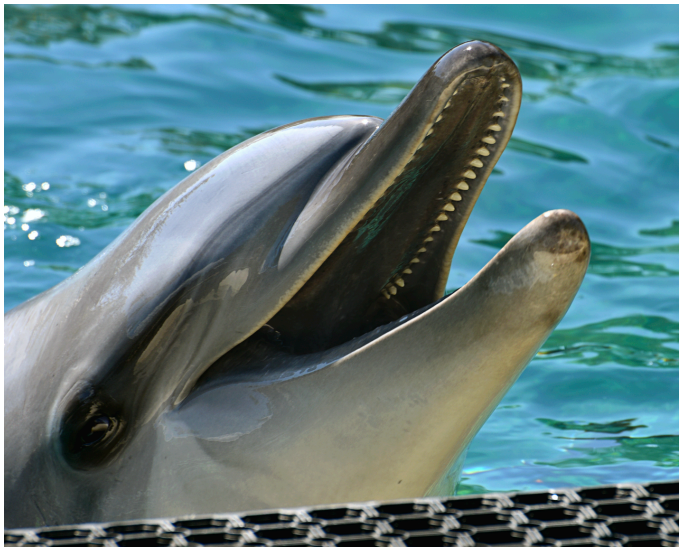
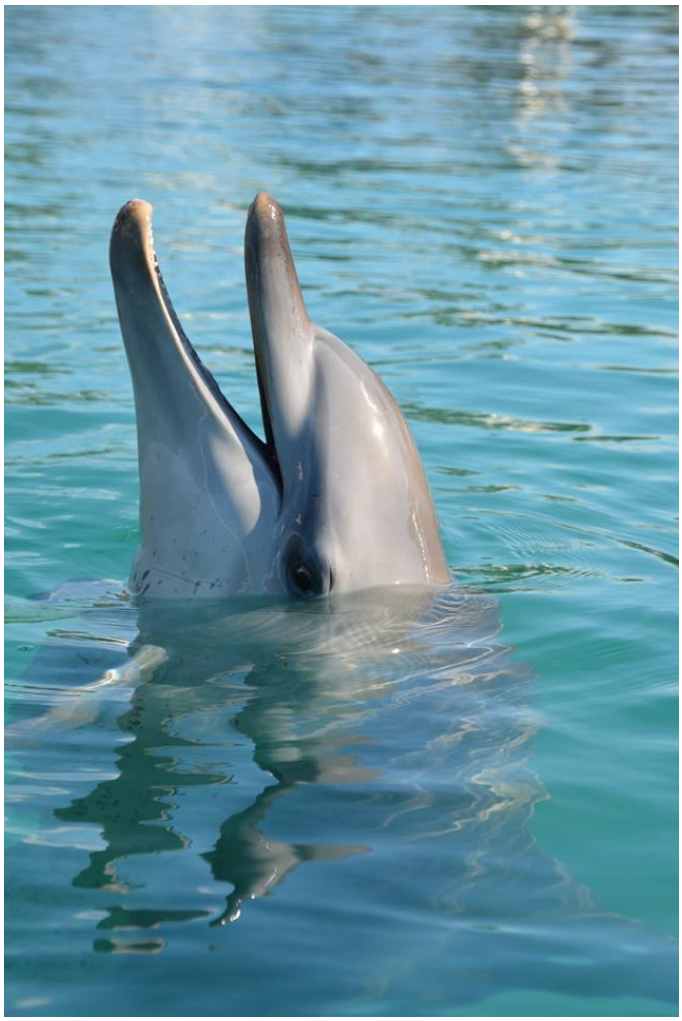
Appendix 6

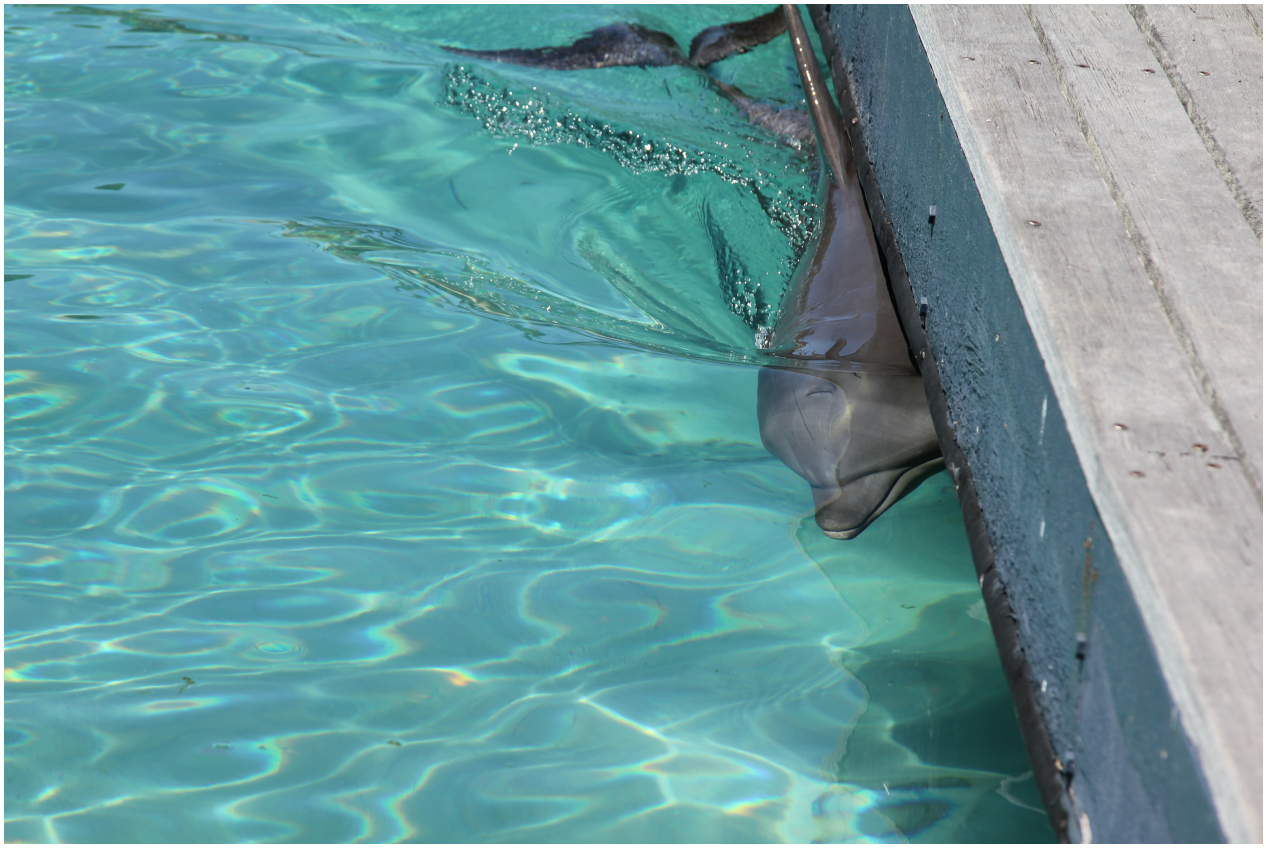
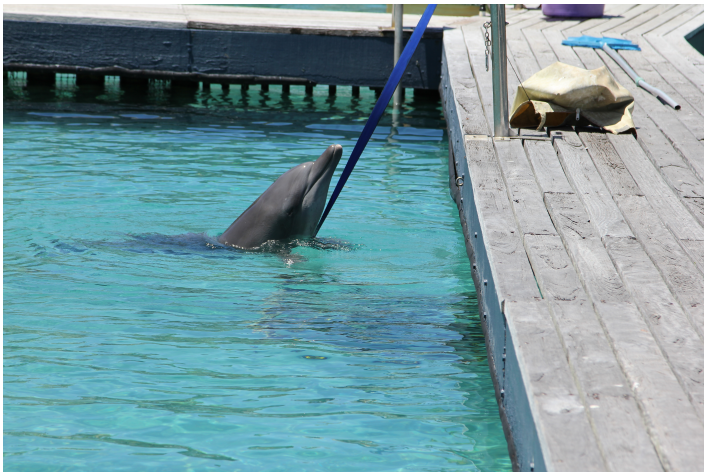
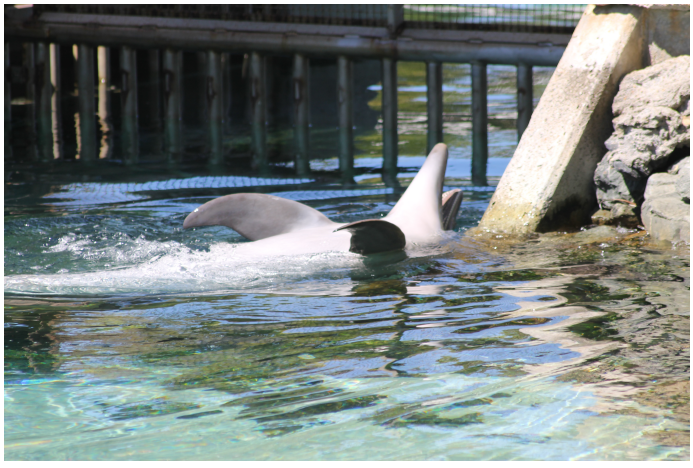
Cliify rostrum and tail fluke wounds SWGC February 2017. Supplied.

Appendix 7

Dolphins with worn teeth at SWGC. Various Supplied





Algae on dolphin teeth at SWGC February 2017. I.N.Visser

Dolphins at SWGC displaying repetitive behaviours. February 2017. Various supplied.