KOBE SUMA SEA WORLD, Japan.

Why it is not a suitable facility for the two French orca Wikie and Keijo.

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Executive Summary

This is a rapid assessment report prepared for the French Government in consideration of the two French orca, Wikie & Keijo - a mother and son - held at Marineland Antibes. It has been revealed that these orca have been sold to Kobe Suma Sea World in Japan. This new facility opened to the public on 1 June 2024. I attended the opening day in order to view the state of facility and the orca held there. My observations herein are based on what I could document from public viewing areas only and for nine hours from 1030-1930 hrs. However, despite these restrictions, what I was able to observe during this short period was concerning.

In summary, I am concerned for the welfare of the orca held at Kobe Suma Sea World. They show stereotypical (i.e., abnormal repetitive) behaviours including chronic regurgitation. They were made to perform five shows in the nine hours I was present. Another five were scheduled for the following day. Later in the month for some days they are expected to perform six shows a day, indicative of the commercial driving force of this company. The shows were repetitive in their overall nature, therefore providing little mental stimulation for the animals. The tanks at this brand-new facility are completely barren and featureless and relatively small. They have no shade to protect them from the sun or the glare off the pale coloured walls that surround their tanks. No environmental enrichment was provided to the orca at any time during the day of observations. Their teeth are in poor condition, particularly those on the mandibles of Stella.

It is my professional opinion that Kobe Suma Sea World is not a suitable place for Wikie or Keijo. The tanks are smaller in size than the ones the orca are held in at Marineland Antibes. Kobe Suma Sea World is a commercially driven facility with a strong focus on marketing the orca as a draw card. The animals are not portrayed in a respectful manner. Instead, they are displayed as if they are pets and/or circus animals. They are used as entertainment for the paying public; they are ridden on, stood on and used to propel the trainers through the air in circus-style shows. This is only one of two facilities in the world that still portrays orca in this manner (the other, Kamogawa Seaworld, is in Japan and is also owned by the same parent company).

If the French Government decides that the orca can be transported to Japan, but they implement a caveat in line with the law against breeding captive cetaceans, then it must be considered that one of the French orca is a male (Keijo). This would mean that the two females currently held at Kobe Suma Sea World would be required to be permanently on chemical contraception (as would his mother). Alternatively, Keijo would need to be separated, and likely kept in solitary confinement, during every time that any of the three females is ovulating. However, concerningly, Kejo may instead be sent to another facility, separating him from his mother – something that would not normally happen for fish-eating orca populations.

No combination of options where Wikie and Keijo are transported to Japan is an improvement on welfare for these two French orca. Instead, it will result in a reduction of welfare. Therefore, the alternative of a sea-side sanctuary should be considered.

Cover Photo: Ran2, the female captive-born orca being stood on as part of a 'rocket hop' trick, during the 1100 hrs inaugural public show at Kobe Suma Sea World, on opening day, 1 June 2024. Photo © Ingrid N. Visser.

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Background

On 1 January 2026, a French law will come into force which will ban the keeping of cetaceans for commercial purposes and for breeding. The law was developed due to the increasing concern by the French public about the welfare for cetaceans in captivity.

This report is a rapid assessment prepared for the French Government in consideration of the two French orca, Wikie & Keijo - a mother and son - held at Marineland Antibes.

The Spanish based owners of Marineland Antibes, Parques Reunidos, sold the two French-born orca to the Japan based company GRANVISTA Hotels & Resorts Co., Ltd., which operates Kobe Suma Sea World and Kamogawa Seaworld. Note the different combination of "Sea World" and "Seaworld" are the official titles for each facility. The three USA facilities use "SeaWorld".

Kobe Suma Sea World currently holds two orca, Stella and Ran2 (see details below), whilst Kamogawa Seaworld holds three orca, Lovey, Lara and Luna (daughters and granddaughter of Stella). The two French orca are destined for Kobe Suma Sea World but once in Japan they could be transferred to another facility and used for commercial purposes and breeding as they will no longer be under French jurisdiction.

Kobe Suma Sea World Orca

Kobe Suma Sea World currently holds two orca, Stella and Ran2, a mother and daughter. A brief background on each of them follows.

Stella was wild-born in Iceland and captured in 1987 when she was just 1 or 2 years old. During the capture she was separated from her mother and has never seen her again. Stella has been held captive in Japan at both Kamogawa Seaworld and Port of Nagoya Public. Stella has given birth to five calves, all born in captivity and all females. Stella was the first orca transferred to Kobe Suma Sea World on 29 March 2024. Further details can be found at: https://www.dolphinproject.com/blog/new-aquarium-same-life-for-japans-oldest-captive-orca/

Ran2 was born in captivity on 25 February 2006 at Kamogawa Seaworld. Like her mother, she was later transferred to Port of Nagoya Public Aquarium. However, she was then separated and sent back to Kamogawa Seaworld. In May 2024 she was transferred to Kobe Suma Sea World. When that transfer occurred two orca at that facility were injured – due to mismanagement of the transfer (see section on these two orca Lovey and Lara).

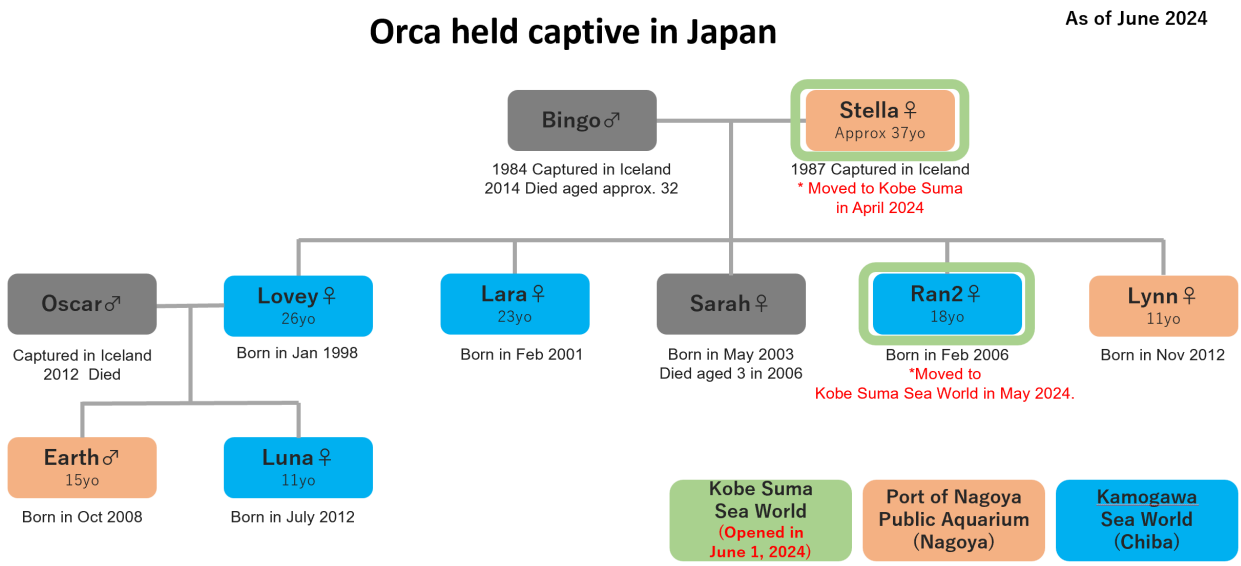

Figure 1. The orca currently held in the three facilities in Japan. Of note is that all the orca are related to Stella and that there is only one male. The value, for breeding, of the two French orca Wikie and Keijo is estimated in the millions of euros, based on previous sales and leases between facilities world-wide and the extremely low level of genetic diversity amongst the orca held captive in Japan. Genealogy chart prepared by the Life Investigation Agency. This is the status as of June 2024.

Orca Teeth at Kobe Suma Sea World

I have published on the state of the teeth of various orca in captivity[1]. It is well established that their teeth get damaged from grinding, gnawing, biting and 'jaw clapping' on hard surfaces such as metal gates, concreted tanks and toys. This results in the pulp of the teeth being exposed and the teeth are subsequently drilled in an attempt to reduce the likelihood of infections. This drilling is typically done without analgesics and results in the orca having permanently open holes. These holes collect detritus such as dead fish parts from feeding and from fish that is

[1] A selection of publications on orca teeth that I have coauthored:
Jett J, Visser IN, Ventre J, Waltz J & Loch C. 2017. Tooth damage in captive orcas (*Orcinus orca*). Archives of Oral Biology. 84:151-160. https://doi.org/10.1016/j.archoralbio.2017.09.031
Marino L, Rose NA, Visser IN, Rally HD, Ferdowsian HR & Slootsky V. 2019. The harmful effects of captivity and chronic stress on the well-being of orcas (*Orcinus orca*). Journal of Veterinary Behavior. 35:69-82. https://doi.org/10.1016/j.jveb.2019.05.005
Visser IN. 2012. Report on the physical & behavioural status of Morgan, the wild-born Orca held in captivity, at Loro Parque, Tenerife, Spain. Free Morgan Foundation.
Visser IN. 2020. Inouk. Captive 20-year-old male orca, with chronic and extensive tooth damage. Update. France: One Voice. Available from https://www.orcaresearch.org/wp-content/uploads/2022/06/Visser-2020-Inouk-One-Voice.pdf.
Visser IN, Jett J & Ventre J. 2019. Inouk. Captive 20-year-old male orca, with chronic and extensive tooth damage. France: One Voice. Available from https://www.orcaresearch.org/wp-content/uploads/2022/06/Visser-2019-Inouk-One-Voice.pdf.

regurgitated and reingested (including from when other orca regurgitate – i.e., the potential for transmission of microorganisms is greatly increased during this behaviour). Additionally, as there are faeces in the water particles from the excrement also enter the holes in the teeth. Naturally this all then results in high risk of infections. As such, the teeth are required to be flushed at least twice a day with betadine or similar. Despite this intensive schedule orca often succumb to infections and require medical attention. The extent of how painful tooth damage is to the orca has been covered in a submission to the United States District Court for the Northern District of California[2].

Footage of the orca at Kobe Suma Sea World, prior to the public opening day, documented that Stella was gnawing on hard surfaces at the facility. This illustrates that although the majority of observed damage to the teeth of these two orca occurred prior to their transfer to Kobe Suma Sea World, the behavioural problems continue and they will result in further damage to their teeth and ongoing concerns for their health. This behaviour also illustrates that the facility is not suitable for keeping orca.

Additionally, the state of facilities holding orca in Japan is questionable as it has only been in this country that the teeth of the captive orca have been documented with a green tinge. It is unclear what is causing this – but one might speculate that it is from algae growing inside the hard structure of the teeth or a chemical imbalance due to the diet of the orca held in Japan.

Stella's Teeth

Many of Stella's teeth are in an abysmal state. On her left mandible, six teeth were worn to the gums and drilled and a further five are worn down 90%. On her right mandible, seven teeth were worn to the gums and drilled. The remaining mandibula teeth show various times of damage. Her upper teeth are in better condition, however a number of them are embedded in the gums. Although this damage did not occur at Kobe Suma Sea World it is indicative that chronic stress issues are to be found at Japanese orca facilities, as they are in all situations where orca are held in concrete tanks. That she has already been documented grinding on hard surfaces at Kobe Suma Sea World illustrates that the issue of her teeth is ongoing.

[2] Visser IN. 2019. (Redacted) Expert Report (Opening) for Marc Anderson, Kelly Nelson and Juliette Morizur, Plaintiffs, v. SeaWorld Parks and Entertainment, Inc. Case No. 3:15-cv-02172-JSW-JCS, before the United States District Court for the Northern District of California. Pp. 328. Available from https://www.orcaresearch.org/wp-content/uploads/2022/06/Visser-2019-Expert-report-SeaWorld-USA-REDACTED.pdf

Figure 2. The drilled teeth of Stella. Although this damage did not occur at Kobe Suma Sea World it is indicative that chronic stress issues are to be found at Japanese orca facilities, as they are in all situations where orca are held in concrete tanks. The ongoing abnormal and repetitive behaviour such as gnawing on hard surfaces, continues at Kobe Suma Sea World. Photo © Ingrid N. Visser. 1 June 2024.

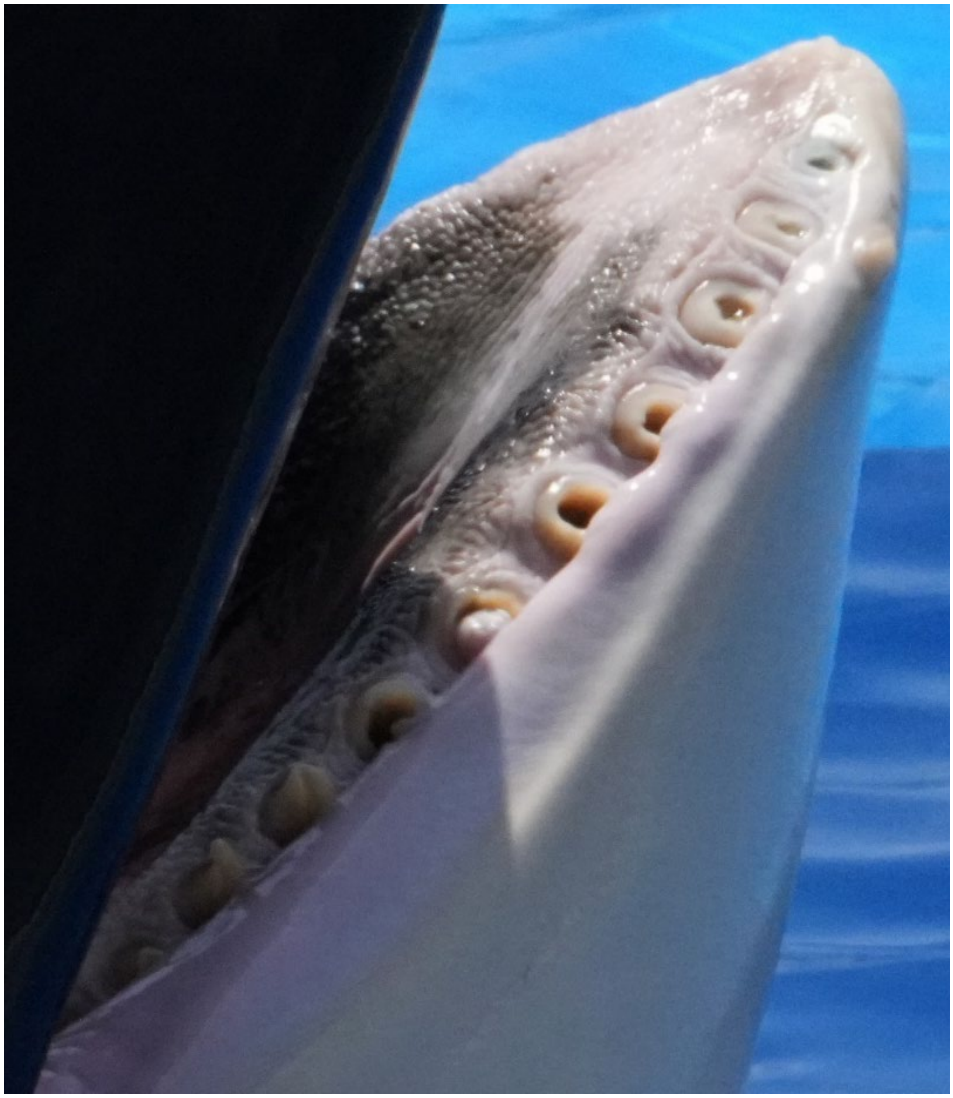

Figure 3. Documented at Kobe Suma Sea World, the state of Stella's teeth are abysmal. Seven teeth on Stella's right mandible were worn to the gums and been drilled. Photo © Ingrid N. Visser. 1 June 2024.

Figure 4. A number of Stella's upper teeth are embedded into the gums. Photo © Ingrid N. Visser. 1 June 2024.

Ran2's Teeth

Ran2's has less wear on her teeth than Stella. However, she still has teeth issues. There appears to be some sort of growth or stain on her teeth, some of which appear green.

Figure 5. At least two of Ran2's teeth on her right mandible have been drilled. One of the holes is very dark, indicating that there is another fundamental underlying issue with that particular tooth. Note the green colouring of some of the teeth and the worn crowns of many. Photo © Ingrid N. Visser. 1 June 2024.

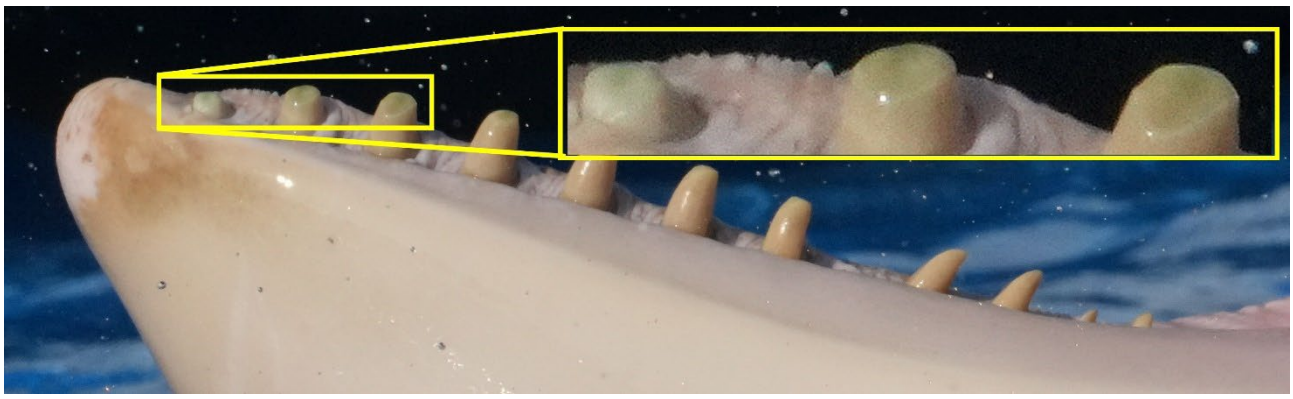

Figure 6. Some of Ran2's teeth have a green tinge to them. It also appears as if one of her teeth(Lower left 8) is missing or damaged as it doesn't appear above the gumline. Photo © Ingrid N. Visser. 1 June 2024.

Welfare: Stereotypical Behaviours at Kobe Suma Sea World

Chronic Regurgitation

In the orca show tank at Kobe Suma Sea World, there were fish parts (scales, bones, fins and flesh) floating at the surface and drifting downwards. At the bottom of the tank there were areas where this regurgitated fish had accumulated due to the water vortexes. The prevalence of these fish particles indicated the severity of the regurgitation. I observed regurgitation and reingestion by both orca.

Such chronic regurgitation and reingestion by captive orca has been documented as related to stress, impacts their health and can cause damage to their teeth[3]. This behaviour has also been documented at Marineland Antibes[4].

[3] Marino L, Rose NA, Visser IN, Rally HD, Ferdowsian HR & Slootsky V. 2019. The harmful effects of captivity and chronic stress on the well-being of orcas (*Orcinus orca*). Journal of Veterinary Behavior. 35:69-82. https://doi.org/10.1016/j.jveb.2019.05.005.

[4] Visser IN. 2020. Inouk. Captive 20-year-old male orca, with chronic and extensive tooth damage. Update. France: One Voice. Available from https://www.orcaresearch.org/wp-content/uploads/2022/06/Visser-2020-Inouk-One-Voice.pdf.
Visser IN. 2021. Moana. Captive-born 10-year-old male orca, with subdermal tissue damage. France: Report prepared for One Voice. Pp21.
Visser IN. 2022. Ongoing issues for INOUK, born in 1999 at Marineland Antibes. Report prepared for OneVoice, 15 August 2022. Pp12.
Visser IN, Jett J & Ventre J. 2019. Inouk. Captive 20-year-old male orca, with chronic and extensive tooth damage. France: One Voice. Available from https://www.orcaresearch.org/wp-content/uploads/2022/06/Visser-2019-Inouk-One-Voice.pdf.

Figure 7. Particles suspended in the water column are visible in this image. Some are floating at the surface and others are drifting downwards. Some of the smaller white dots are likely also small air bubbles, but those would, logically, drift upwards not to the bottom. Photo, Ingrid N. Visser. 1 June 2024.

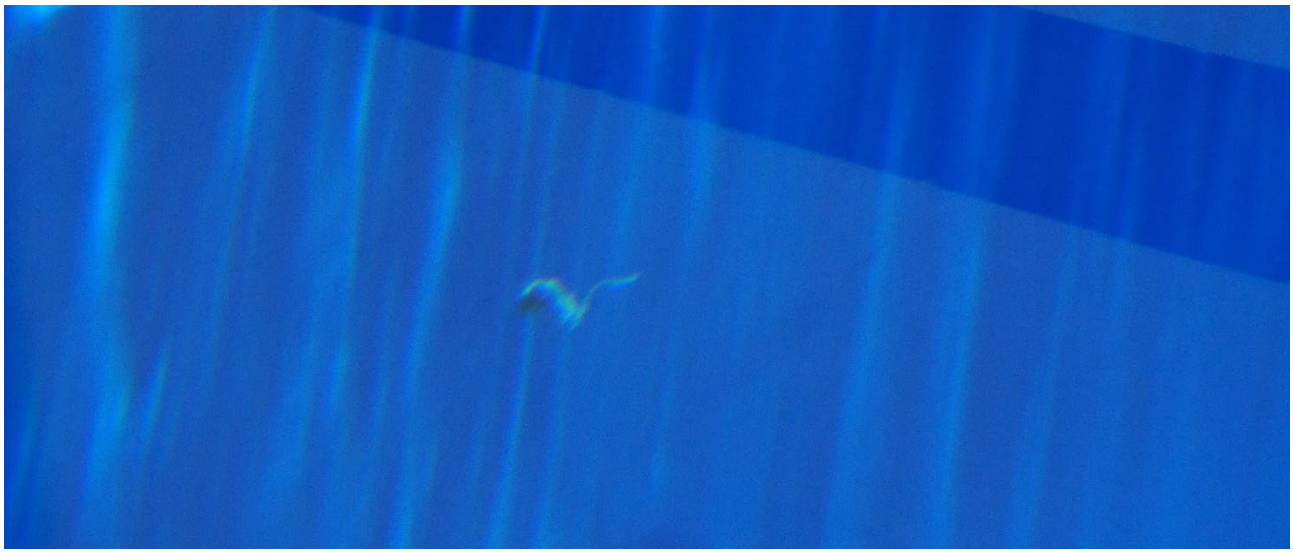

Figure8. Part of a regurgitated fish drifts down inside the orca tank. The thickness of the acrylic prevented a closer, or better focused, image. Photo © Ingrid N. Visser. 1 June 2024.

Pattern Swimming

Orca have evolved over millions of years to be in almost constant motion in the ocean. As an apex predator, they travel day and night and can cover more than a hundred kilometres in a day. They spend most of their time below the water surface and have been known to dive to more than 1000m – and to more than 500 on a regular basis.

As the tanks at Kobe Sume Sea World are so small (see separate section on the tanks), the orca are forced to swim in tiny circles, if they are to meet their evolutionary need for motion. I observed chronic pattern swimming predominantly in a counterclockwise direction. This constant circling has manifested itself in the permanent and partial collapse of the dorsal fin on both Stella and Ran2. Although this likely happened due to counterclockwise pattern swimming at the previous facilities they were kept at, the stereotypical behaviour has become so ingrained that it continues to be displayed at Kobe Suma Sea World.

Drone footage shows that this counterclockwise pattern swimming occurs outside of opening hours at the facility.

Figure 9. The partially collapsed dorsal fin of Stella is partially apparent in this image as she turns towards the camera at Kobe Suma Sea World. Photo © Ingrid N. Visser. 1 June 2024.

Figure 10. The permanent disfigurement of the dorsal fin on each of the orca at Kobe Suma Sea World, where the fin leans to the animals' left, i.e., into the center of the counterclockwise circles that the continually swim. Photo © Ingrid N. Visser. 1 June 2024.

Figure 11. Stella, inverted during the 1100 hrs show. The permanent disfigurement of her dorsal fin is evident in this image, as even in this position, it remains bent over. Photo © Ingrid N. Visser. 1 June 2024.

Hypertrophic Tissue Damage

When a cetacean repeatedly beats part of its body against a hard surface, tissue damage occurs. When that tissue is then reinjured it may cause permanent damage – and symptoms such as pain and/or itching can become prevalent. The repeatedly damaged tissue can appear as a paler area, a discoloured area and/or have a surface structure that is different to surrounding tissue. In the case of Stella, all these are visible. She has a pale area on the symphysis of her mandibles, surrounded by a mustard-coloured discolouration. The tissue in the pale area is a different shade of white to the rest of her chin. It is also a different texture. On her rostrum tip there is also tissue damage. It is less visible due to the black pigmentation, but it is clearly damaged. During the day, she had been rubbing/banging this area on something as it was a different colour at that point.

Figure 12. The hypertrophic tissue damage on Stella. Note the white 'blob' near the mouth line – this was a piece of regurgitated fish that was drifting. Photo Ingrid N. Visser. 1 June 2024.

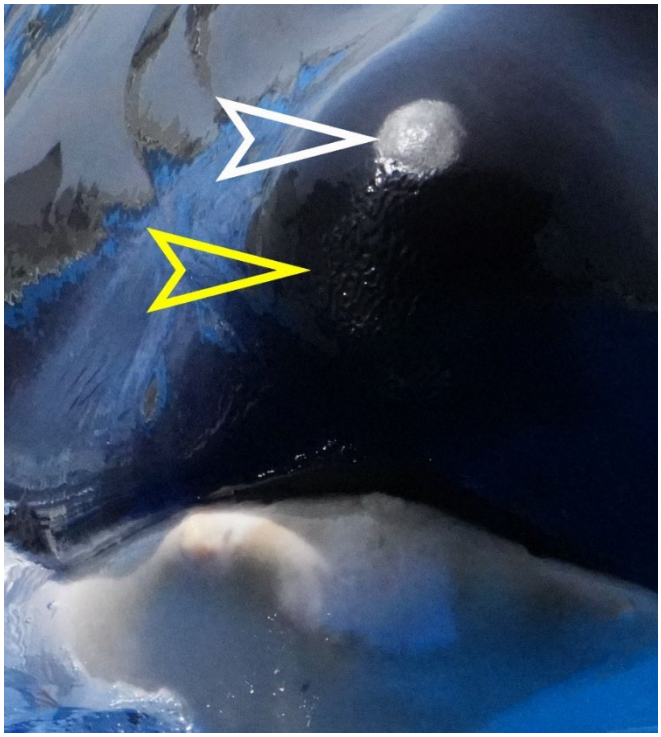

Figure 13. Additional damage to Stella's rostrum (white arrow) which was visible immediately after the show. Photo © Ingrid N. Visser. 1 June 2024.

Figure 14. Note the 'rough' tissue on the end of Stella's rostrum and the discoloured damaged tissue surrounding the tip of her mandibles. Both of these are from repeatedly hitting the soft tissue against a hard surface. Photo © Ingrid N. Visser. 1 June 2024.

Head Beating

Although not documented on the day of my observations, drone footage has documented Ran2 deliberately beating her head against the acrylic wall in the show tank at Kobe Suma Sea World. Head beating in this manner has been documented for a number of cetacean species, including orca. In one instance an orca smashed through the glass window, severely injuring himself. It is gravely concerning that such behaviour has been documented at Kobe Suma Sea World so soon after introduction into a new facility. This behaviour is indicative of severe welfare issues.

Figure 15. A screen shot from drone video, of Ran2 just as she is about to deliberately hit her head against the acrylic wall in the show tank at Kobe Suma Sea World.

Anticipatory Behaviour

Another stereotypical behaviour is 'anticipatory'. It set of behaviours are exhibited when an animal assumes that something is about to happen, e.g., prior to a show where tricks are performed. It can lead to sever frustration and potentially aggression. In the case of both Stella and Ran2 they swam in 'tighter' circles prior to a show compared to after a show, they swam faster and swam with their mouths open in a typical food begging position. They also rested their chins on the ledges around the tank, entered the medical tank in order to see into the trainer area better and swam on their side with one eye out of the water in an attempt to see the trainers coming. This latter can expose the eye to increased glare (see separate section on Glare). Some spy hopping, particularly in gateways was also observed. Begging behaviour (see separate section below) was observed prior to the shows.

Begging & Tongue Rolling

Both begging and tongue rolling are anticipatory behaviours, as well as a stereotypical behaviours. They can also be indicative that the orca are very hungry (i.e., that food has been withheld in order to get the animals to perform).

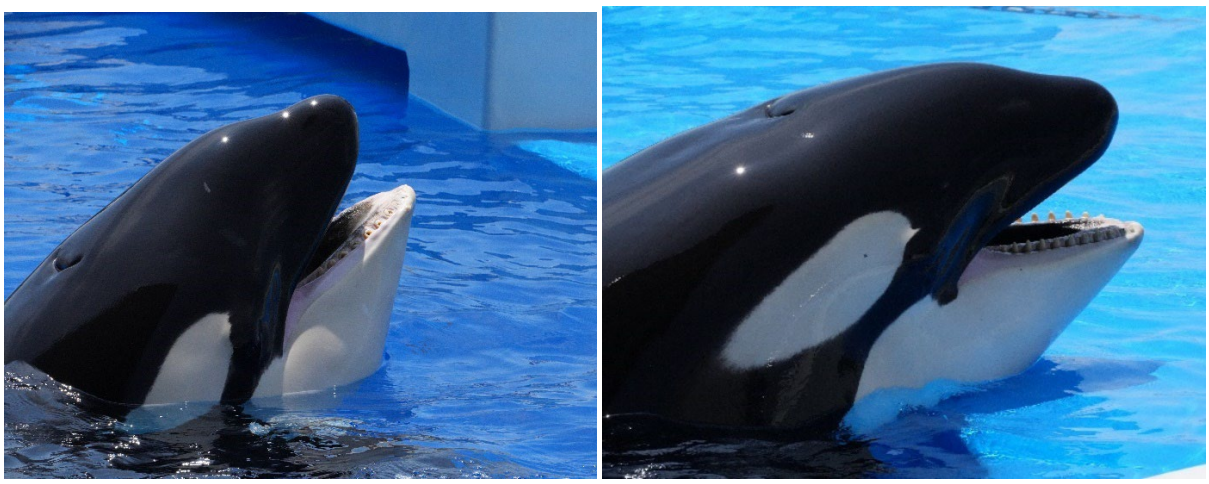

Figure 16. Examples of begging behaviour occurred whilst spyhopping (left) and whilst chin resting on the slide out platforms (right). Photos © Ingrid N. Visser. 1 June 2024.

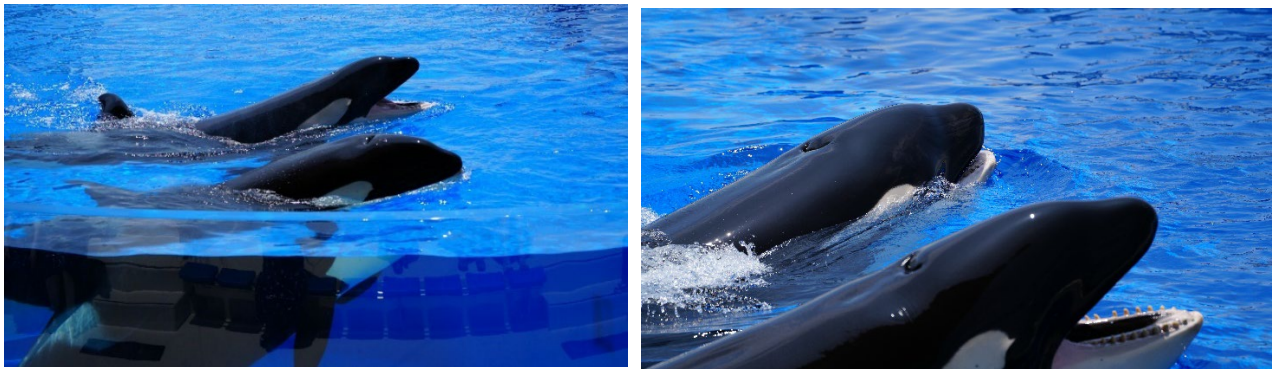

Figure 17. Begging behaviour occurred whilst swimming (left and right) and at times both orca conducted it together (right). Photos © Ingrid N. Visser. 1 June 2024.

Figure 18. Begging behaviour occurred whilst the orca swam in a circular counterclockwise swim pattern, illustrating that stereotypical behaviours can be conducted simultaneously. Photo © Ingrid N. Visser. 1 June 2024.

Figure 19. Stella begging as a trainer(foot just visible on fare left) places buckets into the cooler in anticipation of the upcoming show. Photo © Ingrid N. Visser. 1 June 2024.

Figure 20. Tongue rolling by Stella. Photo © Ingrid N. Visser. 1 June 2024.

Figure 21. Tongue rolling by Ran2. Photo © Ingrid N. Visser. 1 June 2024.

Aggression

Stella had rake marks which appeared to be relatively fresh – based on the skin fragments hanging from the wounds and discolouration surrounding some of them. It was not possible to photograph these close up, however when Stella was commanded to perform a trick in which her whole body left the water, it was possible to see some of the rake marks. The only other orca in the tank with Stella is her daughter, Ran2. It has never been documented in wild orca society that a daughter attacks her mother, illustrating the distorted social aspects that have been forced on these orca (Ran2 was separated from Stella for many years, when they were held captive at different facilities).

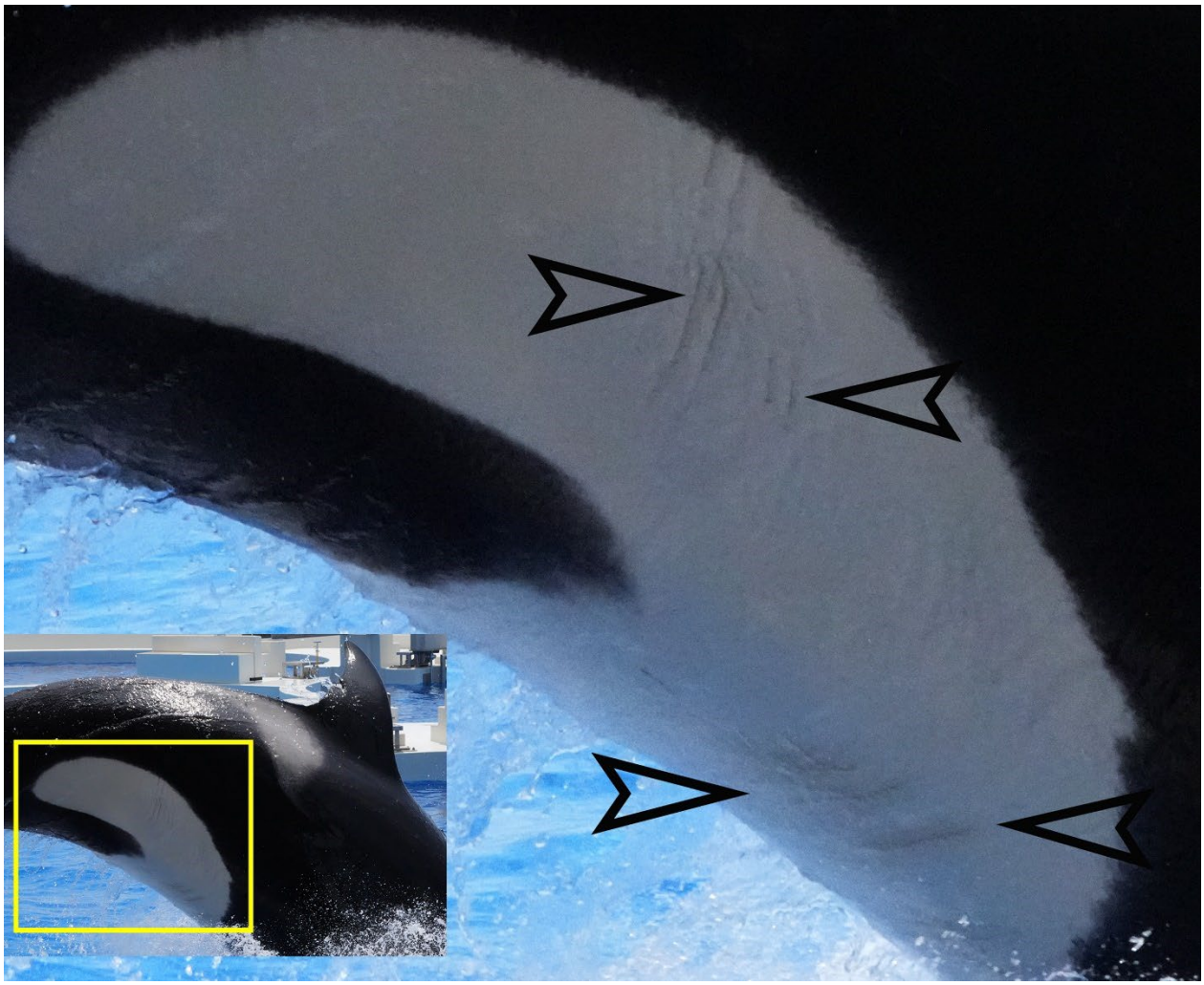

Figure 21. Some of the rake (teeth) marks on the right flank patch of Stella. There were many more on her caudal peduncle. Photograph by Ingrid N. Visser. 1 June 2024.

Mosquitos

It has been established that mosquitos pose a risk of transmitting diseases to captive orca due to the extensive periods of logging (floating at the surface). Those diseases have been the

cause of death of some captive orca[5]. While observing the orca at Kobe Suma Sea World I noted that both orca spent considerable time logging. The behaviour of the orca at night, when mosquitoes are even more prevalent, is not known but based on the prevalence of logging at night by other captive orca, it is highly likely that it is occurring at Kobe Suma Sea World too. Mosquitos are known to be present in the Kobe area.

Figure 22. Ran2 was observed logging at the surface for extended periods between the shows. Photo © Ingrid N. Visser. 1 June 2024.

Figure 23. As the day progressed the prevalence of logging increased for both orca. This image, taken in the afternoon, shows the stillness of the surface of the water – indicative of little to any swimming movement for an extended period. Photo © Ingrid N. Visser. 1 June 2024.

[5] Jett J & Ventre JM. 2012. Orca (*Orcinus orca*) captivity and vulnerability to mosquito-transmitted viruses. Journal of Marine Animals and Their Ecology. 5(2):9-16.

Figure 24. Stella logging at the surface of one of the tanks at Kobe Suma Sea World. Photo provided by and © to Life Investigation Agency/Dolphin Project. 14 April 2024.

Tanks

The orca tanks at Kobe Suma Sea World are comprised of three main tanks and one medical tank. When viewed from above the facility has an overall shape like a cartoon cat or dog face, with the centre performance stage in the position of the 'nose'. The show tank (closest to the stadium) is the deepest but according to information supplied by the company during a phone call, is only 6.5 m deep. Even if double that depth it is only not sufficient for holding orca and the two holding tanks are much shallower than the show tank. The depth of the orca show tank at Marineland Antibes is 11m.

Overall, the tanks at Kobe Suma Sea World are poorly designed with respect to the welfare of the orca. They are small and provide little 'straight-line' swimming opportunities, even if all the gates are left open. Measurements using Google Earth indicate that the show tank is no more than 40m in length whilst the other two tanks are 33m and 27m at their maximum lengths. Both Stella and Wikie are approximately 5m in length[6]. If either of these females were in the show tank and started with their tail flukes against the tank wall, they could swim a maximum of only eight body lengths before they would be forced to turn. Of note is that an adult male orca is

[6] Orca lengths obtained from https://inherentlywild.co.uk/captive-orcas/

larger than a female and therefore if Keijo was transferred to Kobe Suma Sea World, he would be confined even more with this small tank size.

Figure 25. A drone photograph of the four orca Tanks at Kobe Suma Sea World. Note how barren and featureless the tanks are. Also, the direction the orca are facing is consistent with what was observed on the 1 June 2024 – i.e., counterclockwise 'circular' pattern swimming. Only the lower level of the stadium seating is visible in this image, which covers more area than the orca tanks. Photo provided by and © to Life Investigation Agency/Dolphin Project, Japan. 17 May 2024.

Figure 26. The area of the covered stadium and the lack of shade for the orca tanks is apparent in this low resolution image. Screen grab from; https://www.sunearthtools.com/

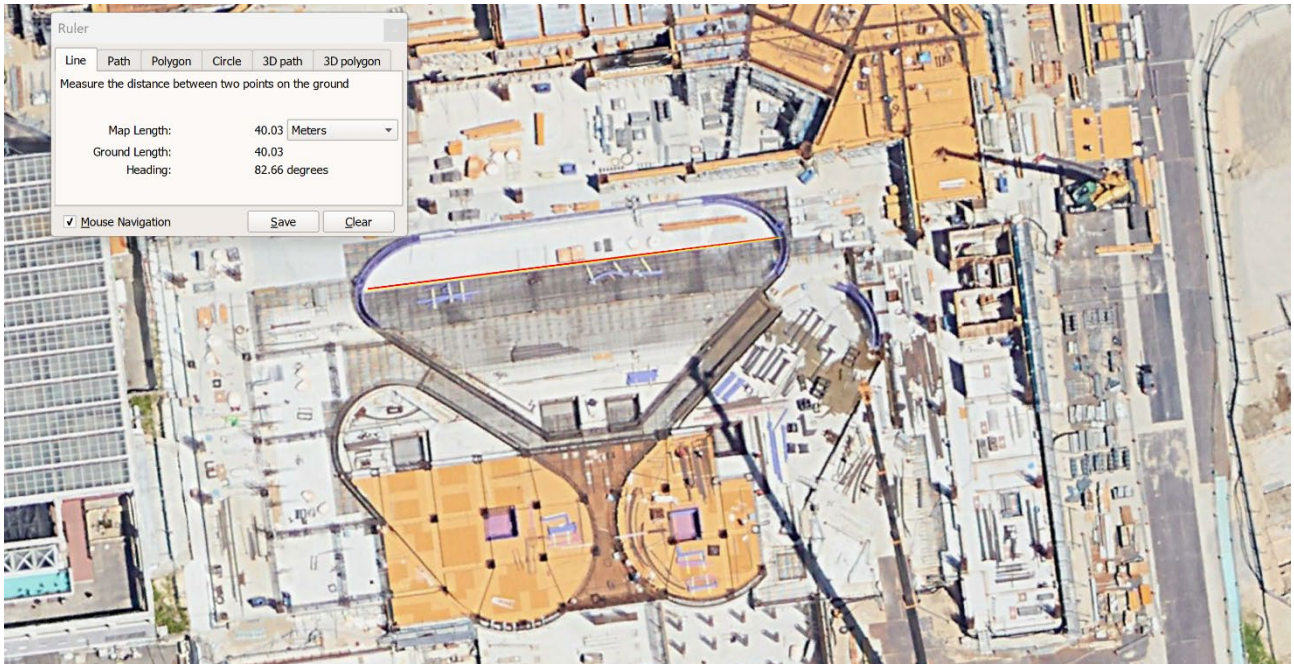

Figure 27. A Google Earth image shows the construction of the tanks underway. The imagery is dated by Google Earth as being from the 22 April 2022, indicating just how new the tanks are. Yet despite this they are poorly designed with respect to the welfare of the orca. The overlay box in the screen shot is from the 'measure' tool on Google Earth. The red line drawn across the widest aspect of the largest tank indicates that it is no more than 40m in length. The other two tanks are 33m and 27m. Image from Google Earth. 22 April 2022.

Figure 28. A view from the orca stadium at Kobe Suma Sea World. The extent of the crowds illustrates just how commercialised this facility is. Note the shade provided for the public, yet there is none for the orca. Photo © Ingrid N. Visser. 1 June 2024.

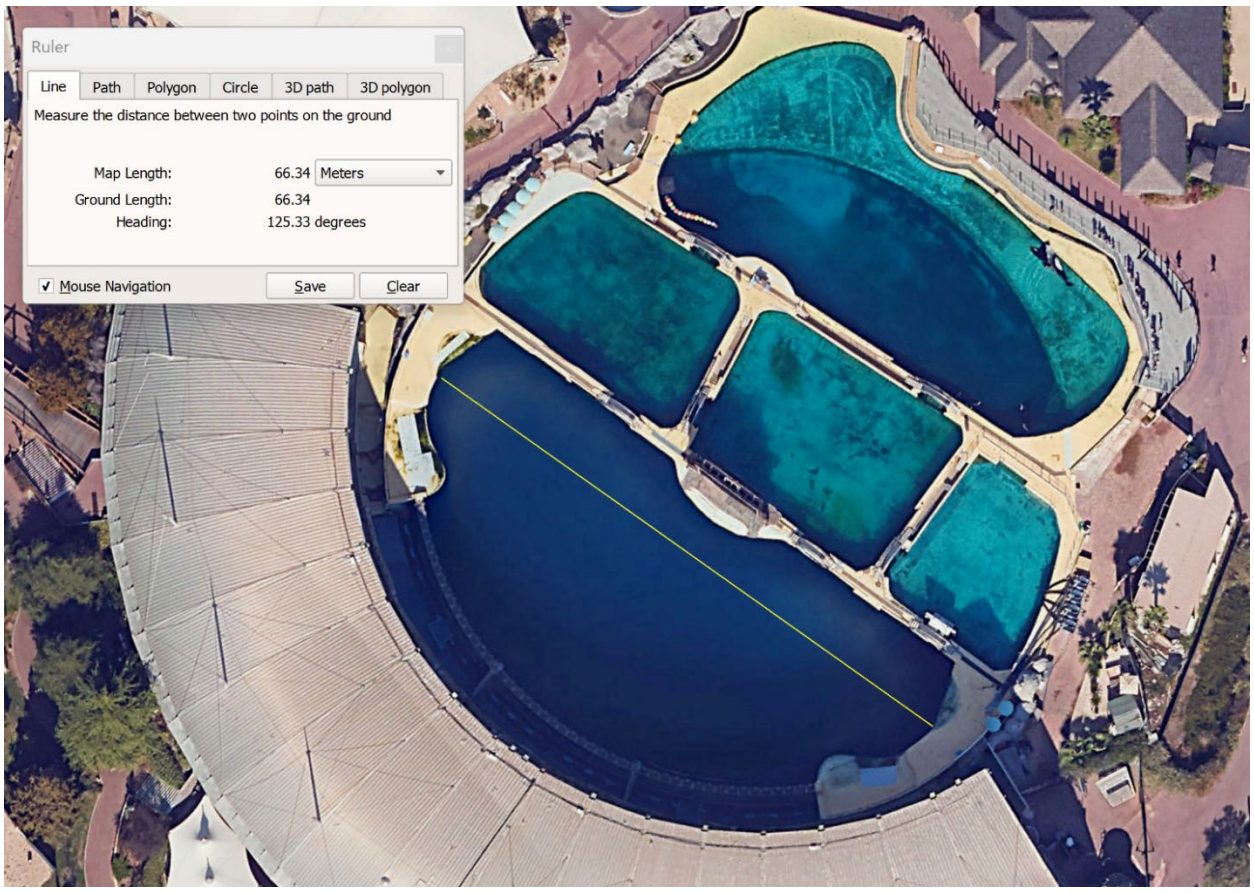

Figure 29. As a comparison, the show tank at Marineland Antibes is 66m across the widest point. Image from Google Earth. Extracted 2 June 2024.

Chains have been placed between the tanks, perhaps as a way to discourage the orca from actually using these areas or to prevent them from attempting to move between the tanks if the gates are closed.

Figure 30. Chains have been placed between the orca tanks. In addition to the gates, these are to prevent the orca from passing from one tank to the other. Photo © Ingrid N. Visser. 1 June 2024.

Glare

I noted that the buildings associated with the orca stadium and built to the east of the orca tanks at Kobe Suma Sea World were painted a pale beige colour. This reflected the light creating a lot of glare in the area of the orca tanks. There is also a wall that surrounds the southern back area of the orca tanks, painted in the same beige colour. In humans glare can cause coorneal sunburn (commonly referred to as "snowblindness"), skin cancers in and around eyes. Symptoms may include burning in the eyes, a flickering sensation, increased light sensitivity, weakened short or long-distance vision, tension, tingling and headaches. It is well established that orca have a keen sense of sight, both above and below the water surface and as such glare would be an issue for them. Of note is that there are barriers all around the walkways and as such the orca have a complete visual barrier to the outside world.

Figure 31. The height of the wall surrounding the south end of the orca tanks is apparent when a person comes out of the door behind the trainer. Even when the orca are hauled out of the water, like Stella is here on the weighing scale, they cannot see the ocean, just meters away from them. Photo © Ingrid N. Visser. 1 June 2024.

Figure 32. Chuck Tomkins, former Vice President of animal training at SeaWorld Orlando USA, for 22 years is seen here instructing trainers at Kobe Suma Sea World. Note the pale coloured walls and that Chuck and a Japanese woman are both wearing sunglasses due to the significant glare – from which the orca have no respite. Photo © Ingrid N. Visser. 1 June 2024.

Disrespect of the Orca

The management to designed the shows and trainers who conducted them, exhibited a level of disrespect for the orca that is reminiscent of old-style circus performances. The trainers rode on the orca, used them like surfboards, lay on them, got pushed around in and out of the water by them and generally turned the orca into nothing more than performance entertainment. Also see the section "Concern for Trainers' Safety".

Figure 33. Examples of the 'water work' at Kobe Suma Sea World, in which a trainer rides on an orca. 1100 hrs show. Photos © Ingrid N. Visser. 1 June 2024.

Figure 34. Examples of the 'water work' at Kobe Suma Sea World where a trainer stands on an orca in various tricks. 1100 hrs show. Photos © Ingrid N. Visser. 1 June 2024.

Figure 35. Examples of the 'water work' at Kobe Suma Sea World. 1300 hrs show – all photos © Ingrid N. Visser. 1 June 2024.

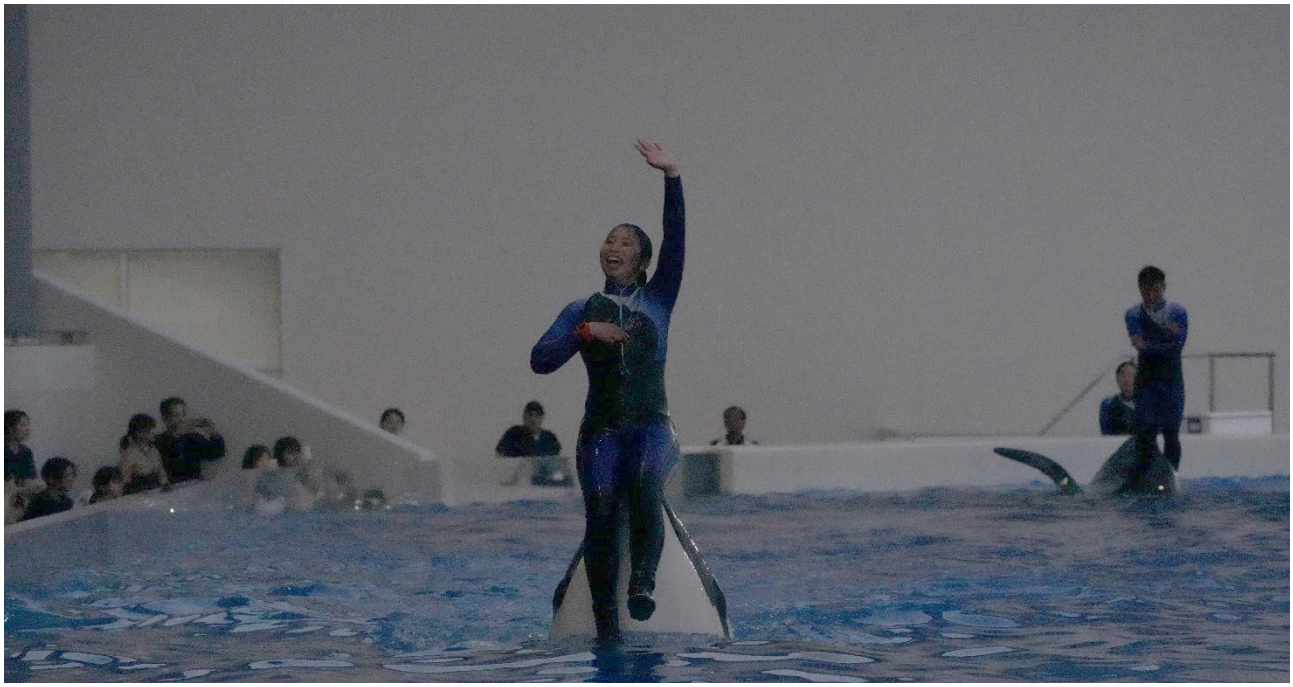

Figure 36. A trainer sitting on the face of Ran2, during the 1900hrs show. Stella can be seen in the background. Photo © Ingrid N. Visser. 1 June 2024.

Also, what is not easily apparent in the photos is that at times the trainers pulled on the pectoral fin of the orca in the 'wrong' direction – which the trainers used as a sign for the orca to splash the audience with their tails. The angle that this was done is not appropriate as this flexes the pectoral fin into a position that can cause soft tissue damage.

Figure 37. A trainer riding on the orca pulls the pectoral fin (left), into a 'backwards' and unnatural position in order to signal to the orca to use its tail flukes to splash the paying public (right). Photos © Ingrid N. Visser. 1 June 2024.

The orca were also required to perform additional tricks that had no educational value and were purely for the entertainment of the paying public. For example, hitting a ball suspended over the tank and splashing the public.

Figure 38. The orca Ran2 performing a somersault in order to hit a ball with her tail. There is absolutely no educational or conservation value in such a trick – it is purely for entertainment. Photo © Ingrid N. Visser. 1 June 2024.

Concern for Trainers' Safety

With the trainers entering the water it is only a matter of time before someone is badly hurt. Around the world, this practise of having the trainers interacting with orca in such a vulnerable way has stopped. The exception is Japan.

The French Government must consider the risks should they issued permits for the orca to be transported to Japan. Entering the water had already been stopped in Marineland Antibes, due to the risks as Wikie is known to be aggressive to trainers. Therefore, if something were to happen to a trainer or other staff member, then responsibility would lie ethically and morally

those that were fully aware of the risks associated with this type of interaction yet issued the permits.

Kobe Suma Sea World trainers do not wear ‘spare air’ or other devices to increase their chances of survival if they are dragged underwater. The use of ‘spare air’ (or similar) has become standard practise in all three Sea World facilities in the USA following a court case against SeaWorld regarding the death of trainer Dawn Brancheau. The use of ‘spare air’ is implemented even though the trainers do not intend to enter the water with the orca.

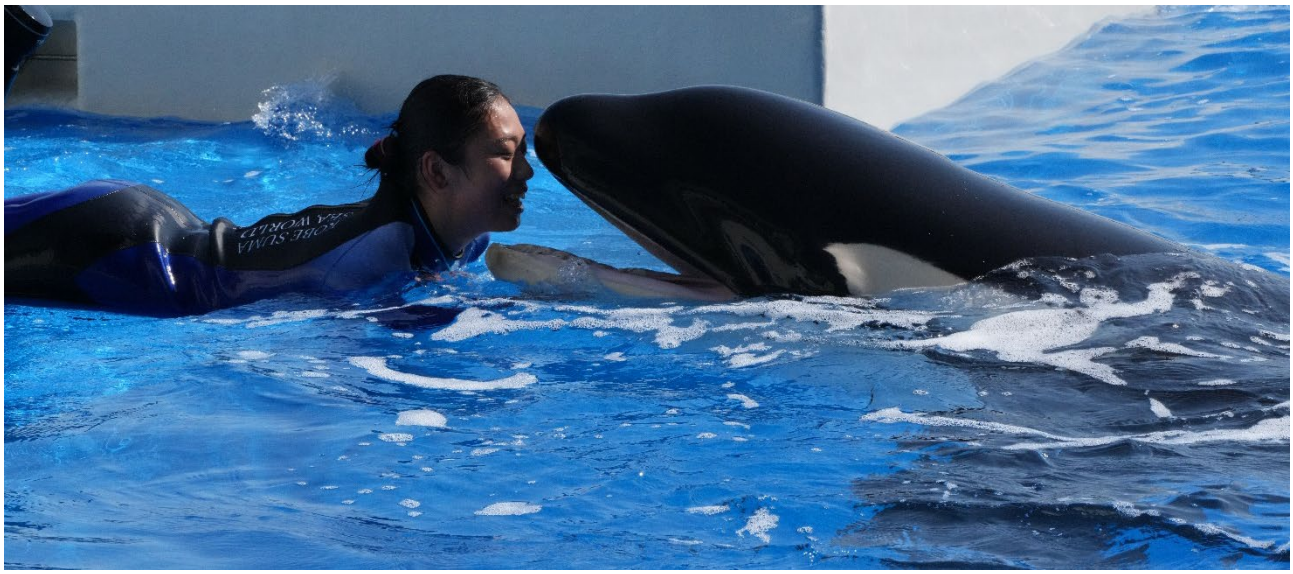

Figure 39. A trainer lying on the platform next to Stella. All interactions in the water with captive orca involve high risk. This position is reminiscent of one of the last photographs of the SeaWorld trainer Dawn Brancheau, moments before she was dragged underwater and killed by Tilikum an orca at SeaWorld Orland. Photo © Ingrid N. Visser. 1 June 2024.

Figure 40. Dawn Brancheau moments before Tilikum the orca (lying next to her) dragged her into the water and killed her. Screen grab from video posted by WESH News on YouTube. https://www.youtube.com/watch?v=EiT-FQVyoe8 . Feb 2010.

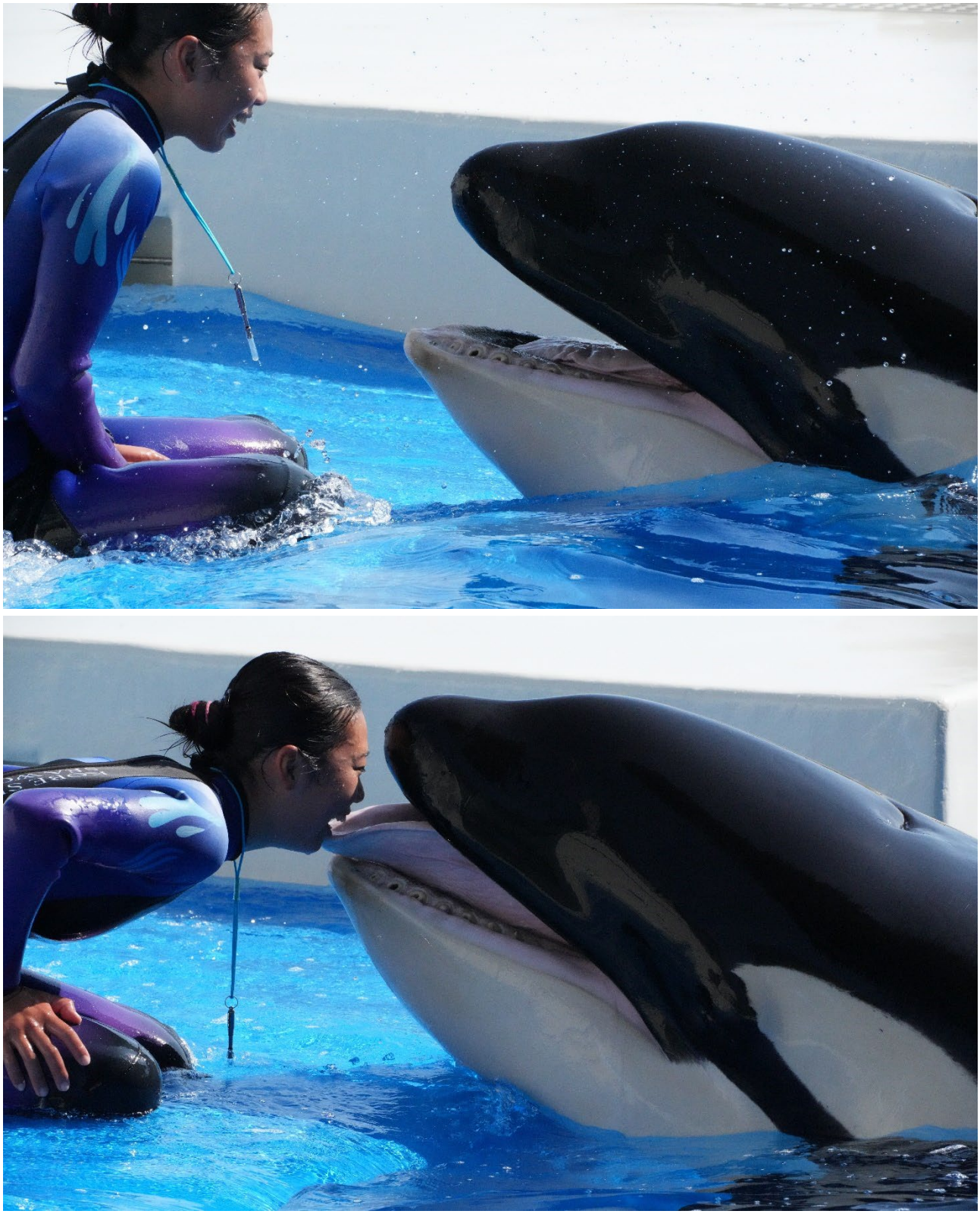

Figure 41. A training whistle hangs between the trainer and Stella the orca. It is unclear if the rope on which the whistle is attached has a 'quick release' mechanism or is like most trainers personal whistles that I am familiar with and the rope is continuous. Should an orca take the whistle into the mouth and pull on it, there is no way for the trainer to remove it and they could be dragged underwater and drowned. Photos © Ingrid N. Visser. 1 June 2024.

Figure 42. None of the trainers at Koebe Suma Sea World use 'spare air' – a small canister of compressed air that the USA facilities have implemented as a method to reduce risk of drowning when working with orca. In this photograph the waist of the trainer can be clearly seen to not have a belt, to which the 'spare air' would typically be attached. Photo © Ingrid N. Visser. 1 June 2024.

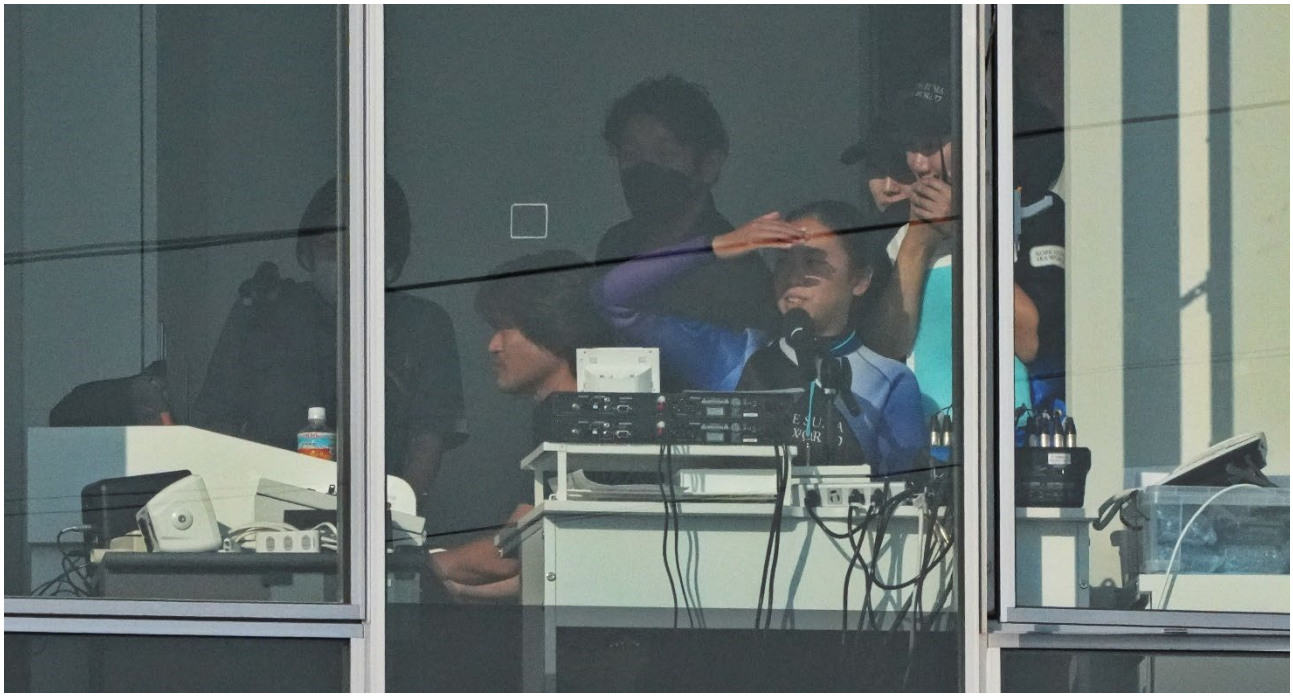

Figure 43. At times the sun is in such a direction that it impacts the ability of the staff in the 'control room' to see the trainers and the orca with 100% clarity (note the seated woman with her hand up to block the sun). This compromised visibility suggests lower safety standards. Photo © Ingrid N. Visser. 1 June 2024.

Commercial Use of the Orca at Kobe Summa Sea World

There are at least 47 facilities holding cetaceans captive in Japan. Only three hold orca; Kamogawa Seaworld, Port of Nagoya Public Aquarium and Kobe Suma Sea World. In comparison, throughout the whole of Europe there are 30 facilities and two of these house orca (one each in France and Spain).

The drawcard of the orca in Kobe Suma Sea World is apparent purely by the sheer number of people in the stadiums (and waiting outside to get in). Even aspects such the signage at the train station, which shows an orca as the icon for the facility, illustrate the iconic nature of the species and its marketing value. The facility is clearly expecting a significant number of people to be visiting the aquarium, if the painted blue path to the aquarium is an indication.

A large array of items for sale at Kobe Suma Sea World were orca related. This included plush toys in a huge array of sizes, bags, hats, head bands, branded cookies, t-shirts, sandals, beach towels etc. Even the food is orca-branded – with the sale of black and white colour ice-cream with whale-tail cookies and hot food in containers with orca on them.

These illustrated the very commercial nature of having orca at this facility. Additionally, there were commercial photographers taking photographs of the public, which they could purchase for an additional fee.

Figure 44. Signage at the train station for Kobe Suma Sea World ranks with Government Agencies such as the Tax Office, indicating the commercial value of the facility. Photo © Ingrid N. Visser. 1 June 2024.

Figure 45. A map at the train station uses an orca as the icon to indicate the location of Kobe Suma Sea World. Photo © Ingrid N. Visser. 1 June 2024.

Figure 46. A blue path on the road from the train station to Kobe Suma Sea World, indicative of the numbers of people that the aquarium is expecting. This path includes bricks laid in a pattern and the whole road has been recently resealed. Photo © Ingrid N. Visser. 1 June 2024.

Figure 47. A family poses for a commercial photographer in front of the orca statue inside the entrance of Kobe Suma Sea World. Photo © Ingrid N. Visser. 1 June 2024.

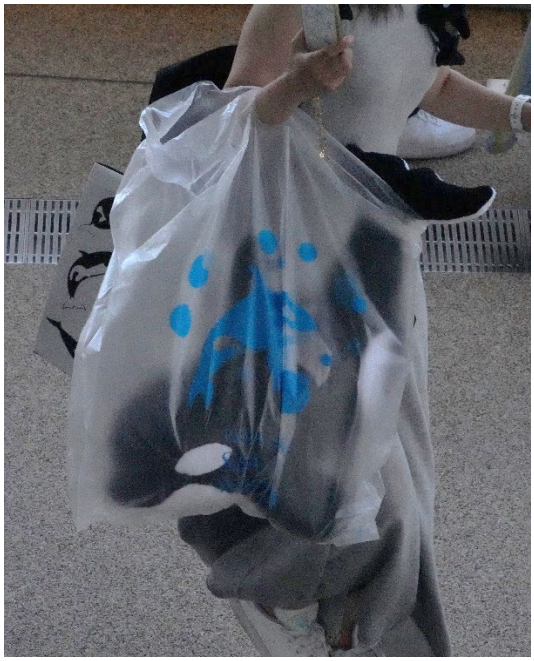

Figure 48. A selection of toys (of various sizes), hats, head bands, bags, and other orca paraphernalia for sale at Kobe Suma Sea World, illustrating the commercial nature (and value) of the orca at this facility. Photos © Ingrid N. Visser. 1 June 2024.

Figure 49. A selection of toys (of various sizes), bags, sandals and other orca paraphernalia for sale at Kobe Suma Sea World, illustrating the commercial nature (and value) of the orca at this facility. Photos © Ingrid N. Visser. 1 June 2024.

Figure 50. A selection of foods that are orca branded or themed for sale at Kobe Suma Sea World, illustrating the commercial nature (and value) of the orca at this facility.

Figure 51. A hour before the show the line to get into the orca stadium is already significant. Photo © Ingrid N. Visser. 1 June 2024.

Figure 52. The line of people waiting to enter the orca stadium extended along the length of the stadium itself and down the stairs. People can be seen going up the stairs to join the line. The crowd at the bottom right is entering the area for the orca shop. Photos © Ingrid N. Visser. 1 June 2024.

Figure 53. The number of people attending the orca shows was illustrative of the commercial use of the orca, which goes in direct conflict to the French law which will be implemented on the 1 January 2026. Photos © Ingrid N. Visser. 1 June 2024.

Around the display area of the orca, including all approaches to the stadium, the only information that I could find about the species (or the individuals on display) was the following sign. It is pathetic in the information given – i.e., the name of the species in three languages. There was more information about people getting wet or slipping over, than about the animals.

An orca skeleton was on display in one room. However no details were given about where this was sourced from.

No details were given, that I could find, on the source of the two orca held at Kobe Suma Sea World (i.e., that Stella was captured from the wild and taken from her mother and that Ran2 is her daughter, born in captivity). It may be possible that this information was given during the show as it was in Japanese and I didn't have a translator with me.

Figure 54. The Under the stadium (past the shop selling a range of orca 'products' – see details below) there were two rooms for education. Neither was busy when I visited them, especially in comparison to the sheer numbers of people on site that day. The information in these rooms was not extensive and for orca was in some cases out of date (e.g., using the information about ecotypes from the USA National Marine Fisheries and National Oceanic and Atmospheric Administration). Photos © Ingrid N. Visser. 1 June 2024.

Figure 55 The orca skeleton on display in the 'information'. I could find no information on this particular orca – e.g., the provenance of the skeleton. Note the small number of people in this area especially in relation to the number of people in the aquarium at the time, including in the adjacent shop). Photo © Ingrid N. Visser. 1 June 2024.

Figure 56. The 'information' movie room. The limited number of people in this area was in stark contrast to the numbers who had paid to attend the aquarium. Photo © Ingrid N. Visser. 1 June 2024.

Two other Relevant Orca: Lovey and Lara at Kamogawa Seaworld

GRANVISTA Hotels & Resorts Co., Ltd., also owns Kamogawa Seaworld, in Kamogawa Japan. That facility has three orca, Lovey, Lara and Luna – all related to Stella and Ran2 (see genealogy section above). During a show on the 27th of April 2024, Lovey was filmed with a fresh and large wound on the tip of her mandibles[7]. It is unclear what caused the wound. Lovey still exhibited an unhealed wound, presumably from the same event in April when I visited Kamogawa Seaworld on 4th of June 2024, i.e., 39 days later.

Figure 57. Lovey, at Kamogawa Seaworld, showing the wound that removed a significant portion of flesh off her left mandible and exposed three of her teeth. On the 4th of June, when I was at Kamogawa Seaworld, Lovey was used during the show, despite this injury. Photo © Ingrid N. Visser. 4 June 2024.

[7] https://youtu.be/NbvapXVOuhY?si=5Pd5cnjC2LWW2GnE&t=140 - see at 10 minutes and 07 seconds

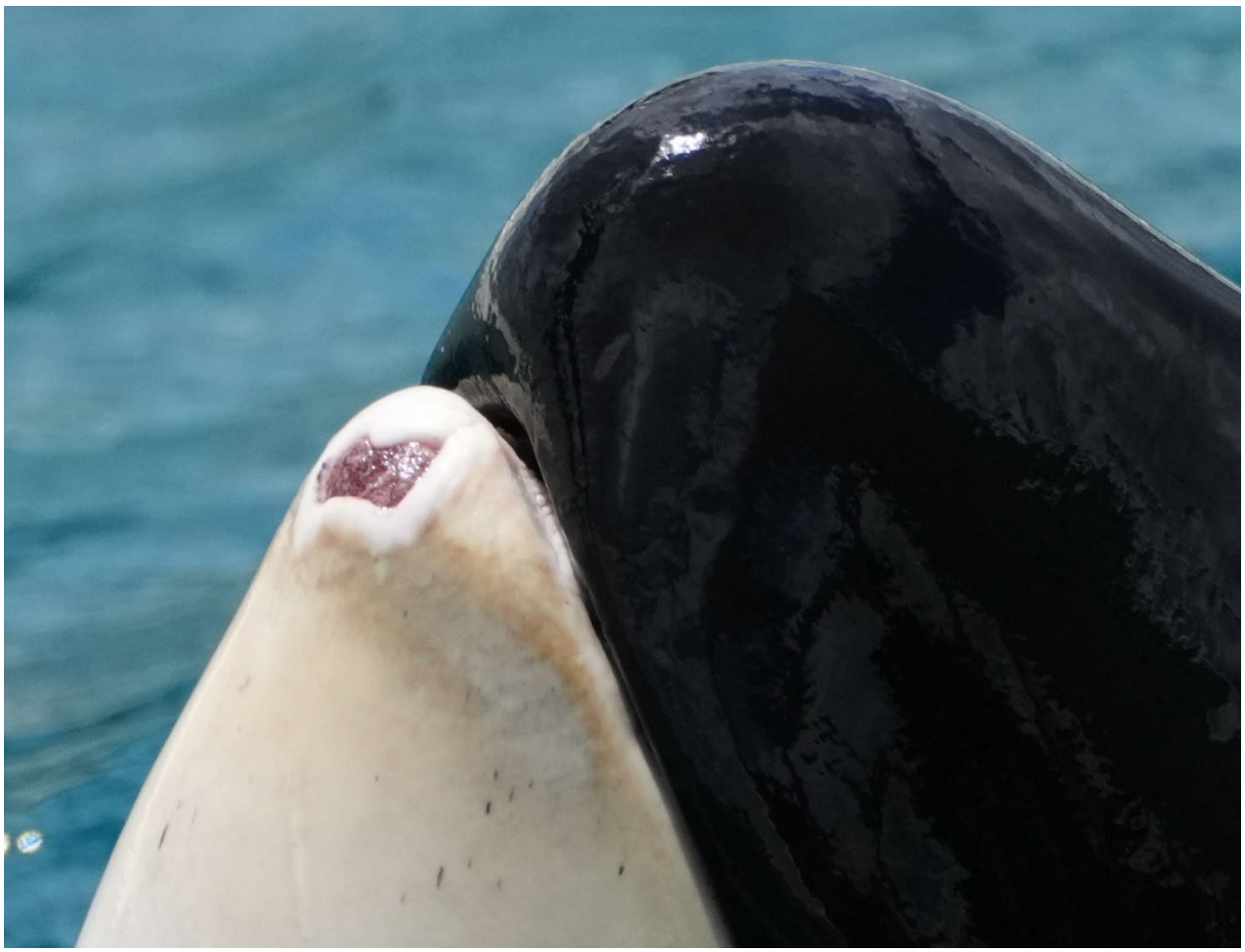

Figure 58. Lara, at Kamogawa Seaworld, showing an open wound of unknown origin and from an unknown date. Despite this injury she was used in the shows, including being used for riding on, sitting on and pushing the trainers around using her head. Photo © Ingrid N. Visser. 1 June 2024.

Despite these injuries both Lovey and Lara were used in the shows, including the trainers riding on them and being pushed around by the orca. This speaks to the poor welfare standards, when the animals are used in such a way when they are injured.

Of note is that the three orca at Kamogawa Seaworld exhibited chronic stereotypical behavioural issues – including severe regurgitation and reingestion and pattern swimming (counterclockwise). All three could be heard calling out and repeating each other's calls. During all my visits to facilities holding orca captive around the world this is the first time I have witnessed this, but similar behaviour has been reported when captive orca are moved between facilities or when a tank-mate dies.

Figure 59. Kamogawa Seaworld, when Ran2 was still held at the facility. The lack of space for four orca is apparent. Photo courtesy of and © Life Investigation Agency / Dolphin Project. 29 May 2022.

Overcrowding at Kobe Suma Sea World

Currently there are two orca held captive at Kobe Suma Sea World. Four orca from Marineland Antibes, France were originally scheduled to be moved there. Subsequently, two of those French orca have died. Even if the two remaining orca are transferred to Kobe Suma Sea World there will be four orca held at that facility. The facility is not of sufficient size to maintain the current orca, so adding two more would lead to overcrowding. Kobe Suma Sea World has a pattern of overcrowding their animals, despite the facility just being recently opened. There are 12 bottlenose dolphins (*Tursiops truncatus*) held in an incredibly small tank system and they exhibit chronic behavioural issues such as regurgitation.

Figure 60. The dolphin stadium contains 12 bottlenose dolphins (*Tursiops truncatus*). This tank system is very shallow (one dolphin can be seen in water that is less than a meter deep in the right tank). The show tank (the deepest tank) is only 6.5 m deep. Photo courtesy of and © Life Investigation Agency / Dolphin Project. May 2024.

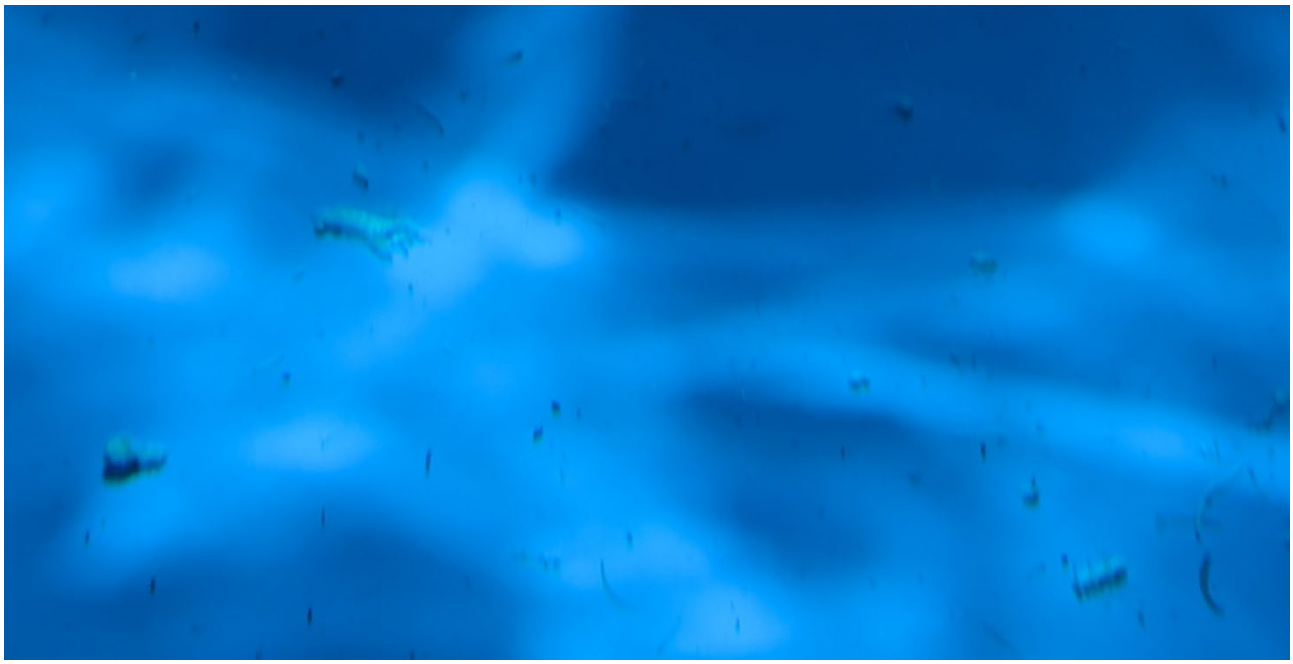

Figure 61. Significant amounts of fish lying on the bottom of the show tank of the dolphin stadium, illustrating just how chronic the stereotypical regurgitation is. Photo © Ingrid N. Visser. 1 June 2024.

Japanese Facilities Holding Cetaceans

At least 47 facilities hold cetaceans captive in Japan, three of which, including Kobe Suma Sea World, hold orca. In comparison, there are 30 facilities throughout the whole of Europe, two of which, including Marineland Antibes, house orca (one each in France and Spain).

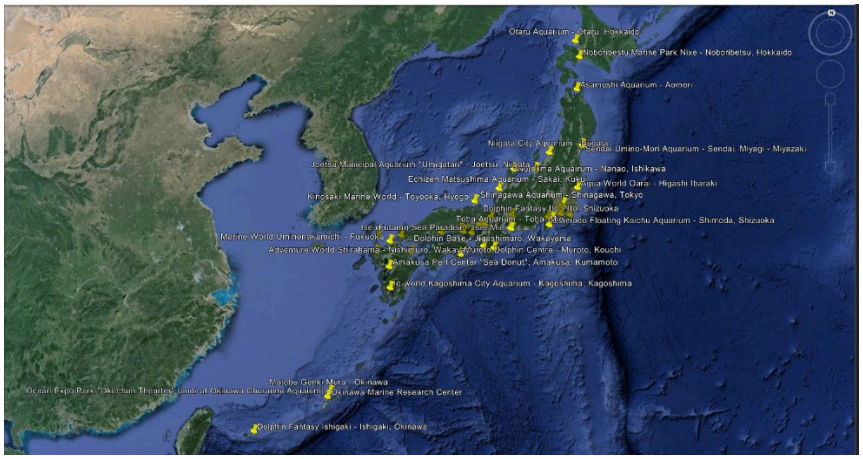

Figure 62. The density of the distribution of the facilities in Japan is high, so much so that the names overlap each other in many instances. Plot of facilities prepared by Ingrid N. Visser using Google Earth. 2 June 2024.

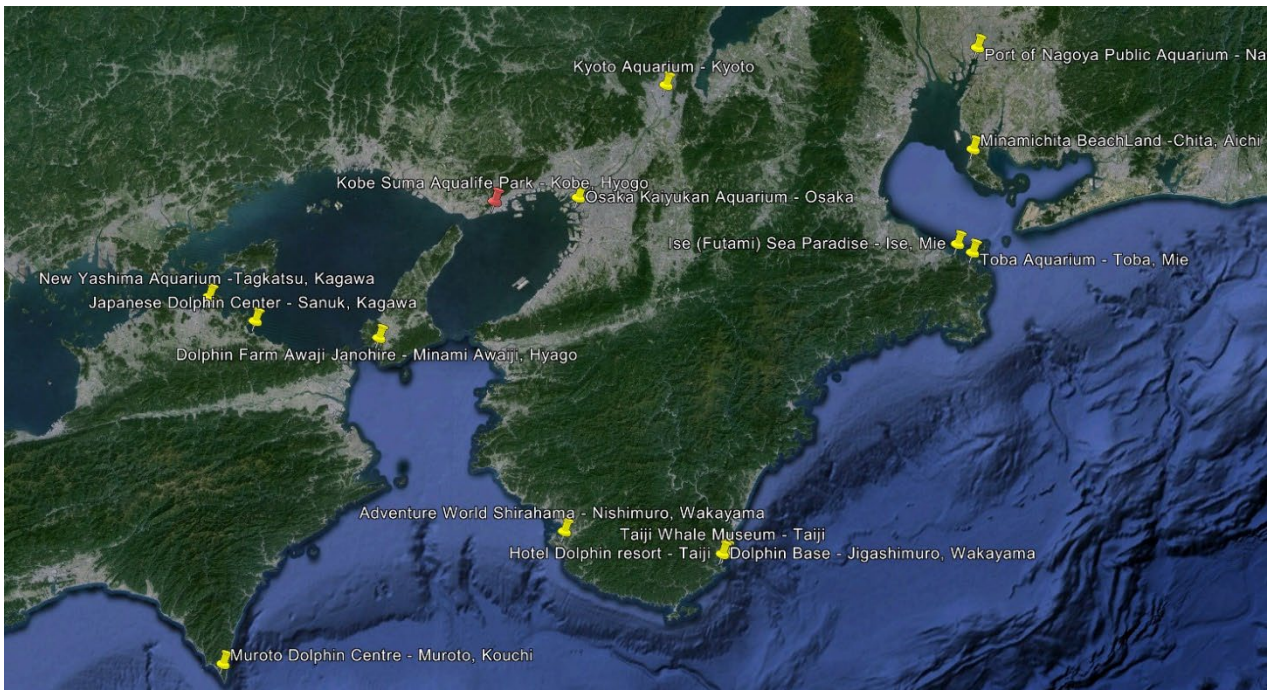

Figure 63. The relative location of Kobe Suma Sea World compared to the nearest facilities holding cetaceans captive. Port of Nagoya Public Aquarium, top right is the only other facility in the area to house orca. That facility is approximately 3 hours away by high-speed bullet train. Stella was moved from Port of Nagoya Public Aquarium to Kobe Suma Sea World in 29 March 2024[8]. Ran2 was moved from Kamogawa Seaworld (not shown in this plot), nearer to Tokyo, on 24 April 2024[9]. Plot of facilities prepared by Ingrid N. Visser using Google Earth. 2 June 2024.

[8] Nagoya announcement.
[9] Kamosea Fan YouTube

Kobe Suma Sea World in the Context of Other Japanese Facilities

In order to establish if Kobe Suma Sea World was representative of the issues facing captive cetaceans in Japan, I visited a range of other facilities. Like the Kobe Suma Sea World visit, these were rapid assessments, but in all instances extreme welfare issues were documented. Inadequate tank / sea pen sizes, barren and featureless tanks/ sea pens, inadequate enrichment, physical injuries and stereotypical behaviours including regurgitation and reingestion were all prevalent. In outdoor facilities the lack of shade was typical, whilst indoor facilities the lack of natural light was prevalent. This illustrates that the standards of care for captive cetaceans in Japan are insufficient to provide for the basic needs of these individuals.

Figure 64. The Japanese facilities surrounding Kobe Suma Sea World. Those which the author visited in May and June 2024 are marked in red. Plot of facilities prepared by Ingrid N. Visser using Google Earth. 2 June 2024.

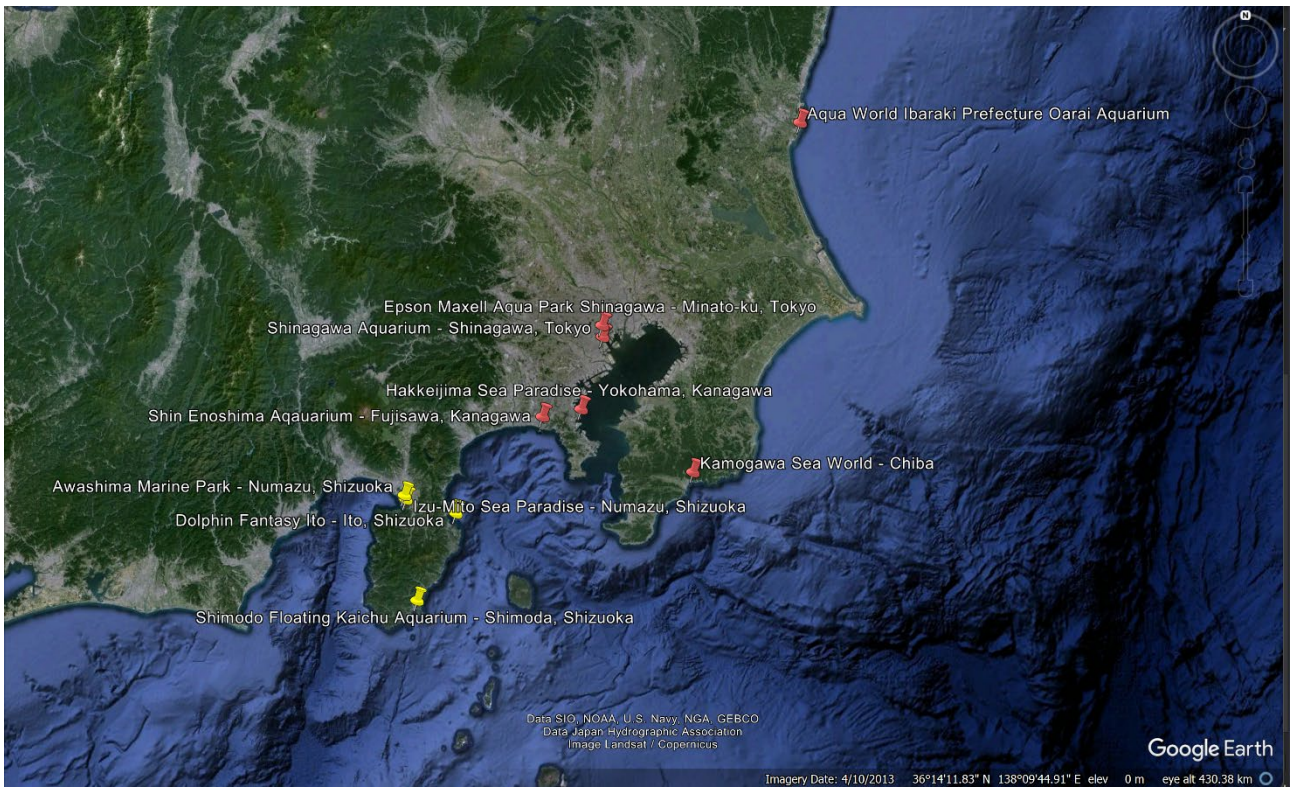

Figure 65. The Japanese facilities surrounding Tokyo. Those which the author visited in June 2024 are marked in red. Plot of facilities prepared by Ingrid N. Visser using Google Earth. 2 June 2024.

Facilities Holding Orca Worldwide

The facilities around the world currently holding orca (all visited by the author); Chimelong Spaceship Aquarium (China), Kamogawa Seaworld (Japan), Kobe Suma Sea World (Japan), Loro Parque (Spain), Marineland Antibes (France), Moskavarium (Russia), Mundo Marino (Argentina), Port of Nagoya Public Aquarium (Japan), SeaWorld San Antonio (USA), SeaWorld San Diego (USA), SeaWorld Orlando (USA), Shanghai Haichang Ocean Park (China).

Additional facilities the author has visited which had orca at the time: Dolphinarium Harderwjik (Netherlands), Marineland Niagara Falls (Canada), Miami Seaquarium (USA), Vancouver Aquarium (Canada).

Author Brief Bio

I have been researching orca since 1992. During this period I have observed orca in Antarctica, Argentina, Australia, Iceland, New Zealand, Norway, Papua New Guinea, Russia and the United States of America. Additionally, I have observed captive orca in seven countries, at all twelve facilities currently holding orca on public display (and three facilities which have since either closed down or no longer hold orca). This includes the French orca, Wikie & Keijo, about whom I have also published various reports. I have published on a range of topics about the species including those in captivity. These are available on the Orca Research Trust website www.orcaresearch.org

How to Cite:

Visser, Ingrid N. (2024). Kobe Suma Sea World, Japan. Why it is not a suitable facility for the two French orca Wikie and Keijo. Pp. 47. Available from Orca Research Trust. www.orcaresearch.org.

Figure 66. Stella breaches above the tiny 'educational' sign, in front of a stadium packed with people at Kobe Suma Sea World, Japan.