

WIKIE, FEMALE ORCA

**WITH UNIDENTIFIED SUB-DERMAL DAMAGE,
HELD AT MARINELAND ANTIBES, FRANCE.**

Expert report, August 2023





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Report prepared by Dr Ingrid N. Visser (PhD) for One Voice (France).

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Cover Image: Wikie, on 17 June 2023. This photo, adjusted for contrast, brightness and levels, shows unidentified sub-dermal issues, on Wikie whilst she was held at Marineland Antibes, France.

EXECUTIVE SUMMARY

On the 17th of June 2023, I visited Marineland Antibes, France to observe the orca (*Orcinus orca*, killer whales). Four orca were present at the facility; Wikie, Inouk, Moana, Keijo.

I have reported elsewhere on my observations of Inouk & Moana (Visser, 2023) as well as the state of the orca tanks. This report focuses on what I observed and documented with regards to Wikie and Keijo. Wikie is an adult female orca born 1 June 2001 at Marineland Antibes. She is the mother of Keijo and Moana and she is the sister of Inouk. As Keijo was born 20 November 2013 and is inbred (his father is believed to be Wikie's half-brother Valentin), therefore he is not only Wikie's son, but also her nephew.

I photographed Wikie from a number of different angles during the day and observed that there were sub-dermal issues / damage in the areas of her mandibles (lower jaws), chin and throat. Adjustment of the images (for contrast and brightness) further illustrates the extent of the issue (Cover and Fig. 1). I also noted similar issues on Keijo.

The pattern of sub-dermal tissue damage is similar to that observed on an orca at SeaWorld California, USA, who subsequently died. The issue also appears to be similar to that which I have previously described for Inouk, Moana (Visser, 2020, 2021a, 2023).

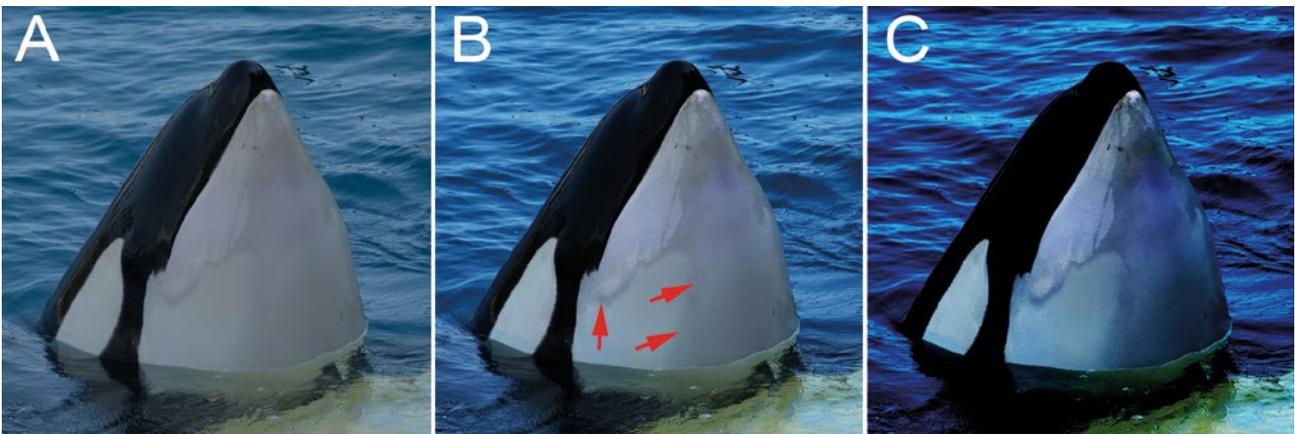


Figure 1. Wikie, on the 17 June 2023, at Marineland Antibes. **A**, the original (unaltered) image shows sub-dermal tissue damage. **B**, the same image adjusted in Photoshop 2023 © for contrast and brightness, illustrating the 'line' (arrows) which shows the extent of the issue on Wikie's right side, and **C** the same image further adjusted using contrast, brightness and levels. Note the tip of the mandibles (lower jaws) is a pale colour due to the hypertrophic tissue damage from stereotypic (abnormal, repetitive) behaviour such as banging the chin on the concrete.

GENERAL OBSERVATIONS

Wikie is the only female orca at Marineland Antibes. She is the mother of Moana (born 16 March 2011) and Keijo (born 20 November 2013). Keijo is understood to be 12.5% inbred, as his father is believed to be Valentin (who died at Marineland Antibes on 12 October 2015). Valentin was a half-brother to Wikie, both having the same father. This also means that Keijo is not only Wikie's son, but also her nephew. The remaining male at Marineland Antibes is Inouk (born 23 February 1999) who is Wikie's full brother and Keijo's uncle.

Wikie is now the only orca at Marineland Antibes who does not have a partially collapsing or collapsed dorsal fin (compare figure 2 to figures 3 and 4).

I observed Wikie performing tricks during shows at Marineland Antibes. These tricks included, but were not limited to, sliding out on to the stage platform (figure 4) and performing 'aerial' ticks (figure 5). Wikie was required, like all the orca at Marineland Antibes, to beg for her food in an unnatural manner (head out of the water), after these tricks (figure 6).

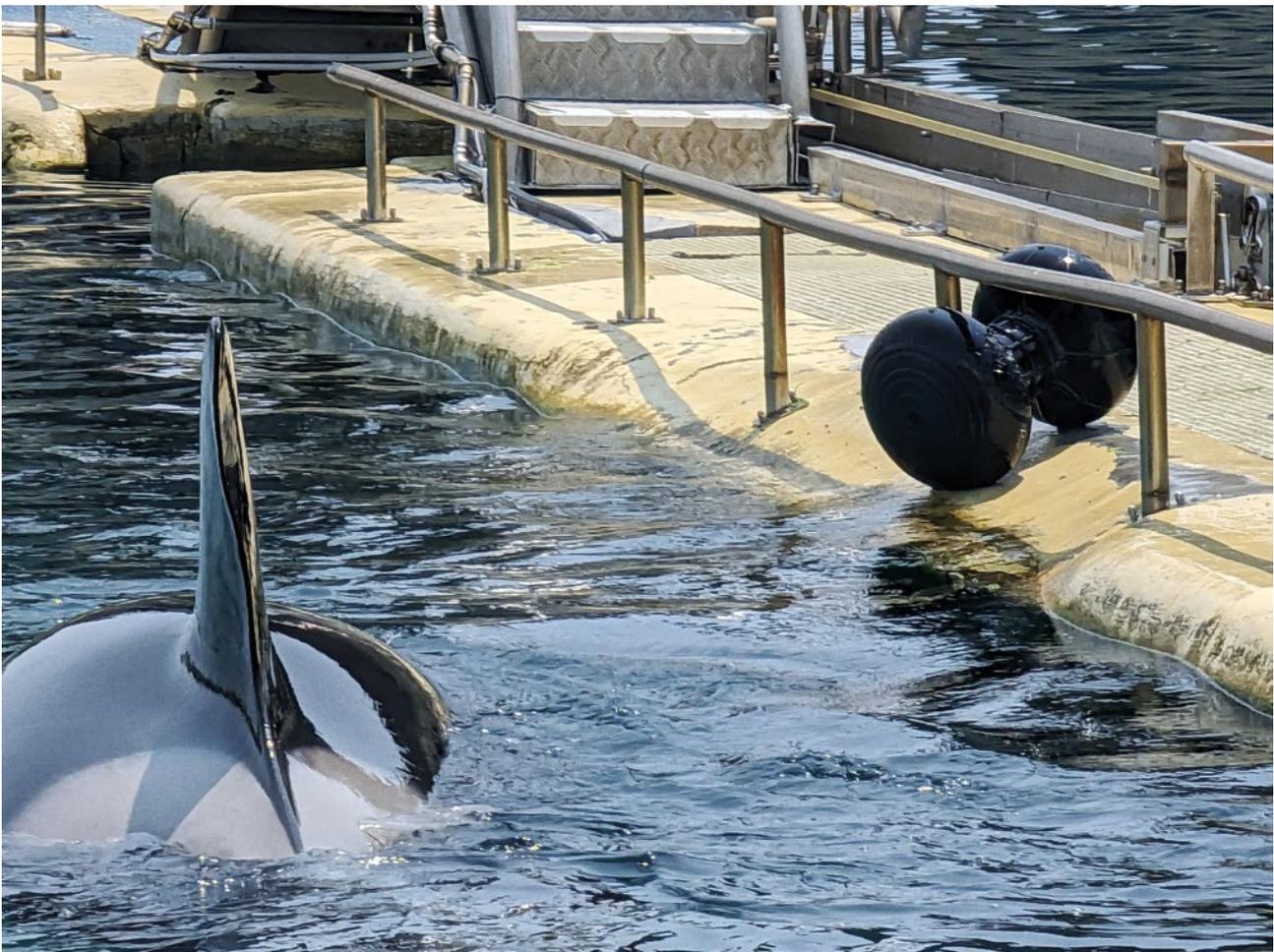


Figure 2. Wikie can be distinguished from the other orca at Marineland Antibes by, inter alia, her straight dorsal fin which is also shorter than Keijo's (her son/ nephew) see figure 4. Note the poor quality of the mustard-coloured paint on the adjacent tank edge and the black dumb bell referred to in the text.

GENERAL OBSERVATIONS



Figure 3. Left to right; Keijo (born 2013) with his fin starting to lean over, Moana (born 2011) with his fin collapsed and Inouk (born 1999) with his fully collapsed fin.



Figure 4. Wikie (left) and her son Keijo (right) performing during at show. Photo taken 1207 hours, 17 June 2023. Note that Wiki's fin is slightly shorter than Keijos and that Keijo's fin has a slight buckle in it as it begins to collapse (see figure 3).



Figure 5. On 17 June 2023, Wikie was documented performing in the two shows of the day. This image was taken at 1211 hours, in the first show of the day. It is not typical to see this type of aerial behaviour in the wild, although the captivity industry will often describe such tricks as 'natural'.

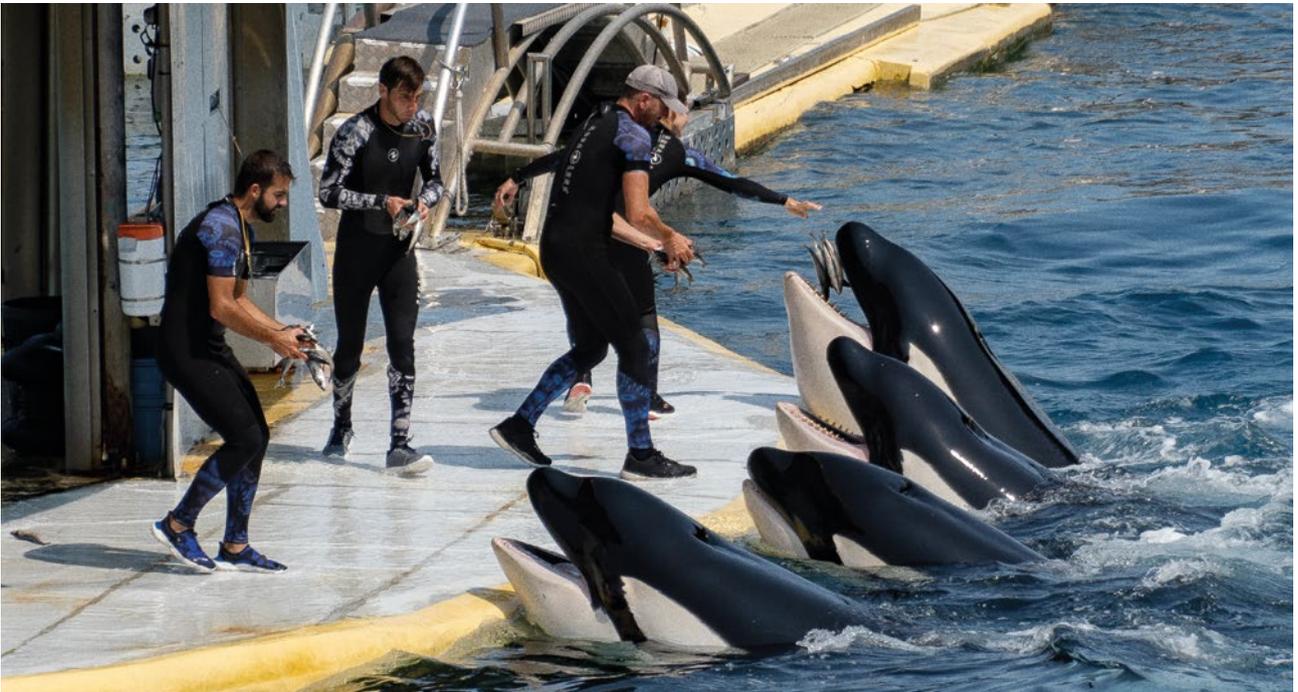


Figure 6. The four orca at Marineland Antibes are required to beg for their food, after each trick during the show. Orca in the wild do not scavenge dead fish, nor do they feed with their heads above water.

STEREOTYPIC BEHAVIOUR

Before, between and after the shows Wikie was documented manipulating a 'dumb bell'. This included her flicking/lifting it out of the water onto the net surrounding the show tank (screen grabs from a video are presented in figure 7, video available) so it would bounce back into the water.

Although Wikie exhibited varied behaviours in the recovery of the dumb bell (e.g., pushing it to the surface with her pectoral fin or her melon or her dorsothorax), the overall repetitiveness of the behaviour was obvious. For example, seven similar events documented in just 2 minutes and 21 seconds (figure 7). Furthermore, bouts of this behaviour were observed throughout the day and again, although varied in location and exact methods, a similar behaviour was documented with the dumb bell being lifted / tossed onto the concrete between the show tank and the northwestern tank and the show tank (figures 8 & 9). And the slide out at the eastern end of the show tank (figure 11).

The degree to which this similar behaviour, of manipulating the dumb bell, occurred throughout the day was indicative of an obsessive / compulsive behaviour. The very nature of this has elements of a 'stereotypic behaviour' (i.e., an abnormal repetitive behaviour such as a ritualistic movement, posture or utterance which is performed with no outwardly obvious function – see (Mason, 1991) for definitions and examples). Although some may claim that Wikie's manipulation of the dumb bell has an 'outwardly obvious function', (as the behaviour could be classified as playing), the very nature of it being ritualistic and performed excessively, would lead me to believe that it should be, at the very least, monitored to prevent further development into a full-blown stereotypic behaviour. It is of note that stereotypic behaviours are typically associated with boredom and poor welfare (Mason, 2006; Swaisgood & Shepherdson, 2006; Mason et al., 2007).

Keijo was observed swimming with his head above the water and rolling his tongue (figure 13).



Figure 7. Wikie was documented repeatedly (throughout the day) with a dumb bell (black arrow, near top of frames). Video illustrated that she lifted/tossed the dumb bell out of the water seven times in just 2 minutes and 11 seconds (see frame grabs above). The time in minutes and seconds is indicated at the bottom of each frame. Note that at 5th instance (1 m 40 s) the dumb bell is shown just as it has entered the water surrounded by bubbles (red arrow) and before Wikie picks it back up again. The repetitive and ritualistic nature of this is indicative of an obsessive behaviour.



Figure 8. Wikie attempting to recover the dumb bell she has tossed onto the concrete between the show tank (rear) and the northwestern tank which she is in. Note the sub-dermal tissue damage visible over her mandibles. This photograph, taken on an android phone has not been manipulated or adjusted (also see figures 9-12 for further examples of this obsessive compulsive behaviour).



Figure 9. Wikie attempting to recover the dumb bell she has tossed onto the concrete by the bridge between the show tank (rear) and the northwestern tank which she is in (and see figure 10).

STEREOTYPIC BEHAVIOUR



Figure 10. Wikie attempting to recover the dumb bell she has tossed onto the concrete by the bridge between the show tank (rear) and the northwestern tank (i.e., the opposite side to figure 9).



Figure 11. Wikie attempting to recover the dumb bell she has tossed onto the concrete slide out area, at the eastern end of the show tank.

During my visit on 17 June 2023, I noted that both Wikie and Keijo showed various stereotypical behaviours. These included pattern swimming (predominantly in a clockwise direction).

Dr van Elk writes in his reported dated 15 November 2022, under the heading “5. Both killer whales present stereotypies and prostration.” that “I observed the whales in the morning for 30 minutes, without audience while being trained, during the inspection (approximately one hour), during the presentation with trainers (approximately 30 minutes and for an hour without trainers and without audience. During these observations I did not notice a single stereotypic behaviour, nor any stereotypic swimming pattern, nor any aggressive interaction between pod members. The animals were active and positively socially interested in one another. The animal human bond was harmonious, animals were well prepared to come and interact with humans. I did not notice any signs of frustration or anxiousness. In short during my observations the animals presented with healthy active and social behaviour with harmonious animal human relations.”

From this comment a number of things can be deduced. 1. Dr van Elk spent only 1 hour watching the orca whilst they were not engaged in any other ‘events’ (e.g., training, show or inspection). Given that stereotypic behaviour is a manifestation of, among other things, boredom, that Dr van Elk didn’t see any during the remainder of his time with the orca (2 hours, according to his report) is to be expected.

In contrast, I observed stereotypic behaviour within just a few minutes of arriving into the Marineland Antibes Orca Stadium and observed and documented numerous examples during my visit. I witnessed and documented the obsessive and repetitive engagement with a toy by Wikie (figures 7-11). I observed pattern swimming throughout the day and also logging (i.e., extended periods of floating at the surface, which I presume is what Dr van Elk means by ‘prostration’

referenced in his section heading, but not referred to in the report. It is of note that ‘prostration’ as defined by the English Oxford dictionary is “the state of lying stretched out on the ground with one’s face”). I observed ‘drifting’ – floating at the surface but slowly moving – such slow behaviour is abnormal for wild orca.

I documented both Wikie and Keijo repeatedly swimming with their head above the water and their mouth open. During these events each would, at times, also manipulate and roll their tongue (figures 12 & 13). Such behaviour could be considered akin to thumb-sucking in an adult human, which is also considered a stereotypic behaviour – i.e., although tongue rolling is observed in young orca who suckle (in order to guide the viscose milk into the mouth), it is abnormal to see it in adults. In humans, thumb sucking may be enhanced by psychiatric disorders and anxiety.

I also documented extreme teeth wear on both Wikie (figure 12) and Keijo (figure 13). There are numerous publications reports documenting the damage to the teeth of captive orca (Visser, 2012; Ventre & Jett, 2015; Visser & Lisker, 2016; Jett et al., 2017; Visser, 2021b) including at Marineland Antibes (Visser et al., 2019; Marineland Antibes, pre 2017a, pre 2017b). A former trainer at Marineland Antibes stated that the orca damage their teeth when they “they gnaw on and play with a number of hard plastic toys which can easily result in broken teeth. The whales also chew on walls, gates and each other’s fins” and she describes how the teeth wear down to the point where the nerves are exposed and then the trainers drill them (McBride, 2019). Whilst at Marineland Antibes I documented a number of toys with orca teeth punctures (see figure 8) or ‘scrape’ marks left by their teeth (figure 14). The ‘boomer ball’ toys¹ such as the ones in figure 14 are typically made of extremely hard and durable plastic resin polyethylene².

¹ <https://www.wildlifetoybox.com/p-balls.html>
² <https://www.wildlifetoybox.com/faqs>

STEREOTYPIC BEHAVIOUR

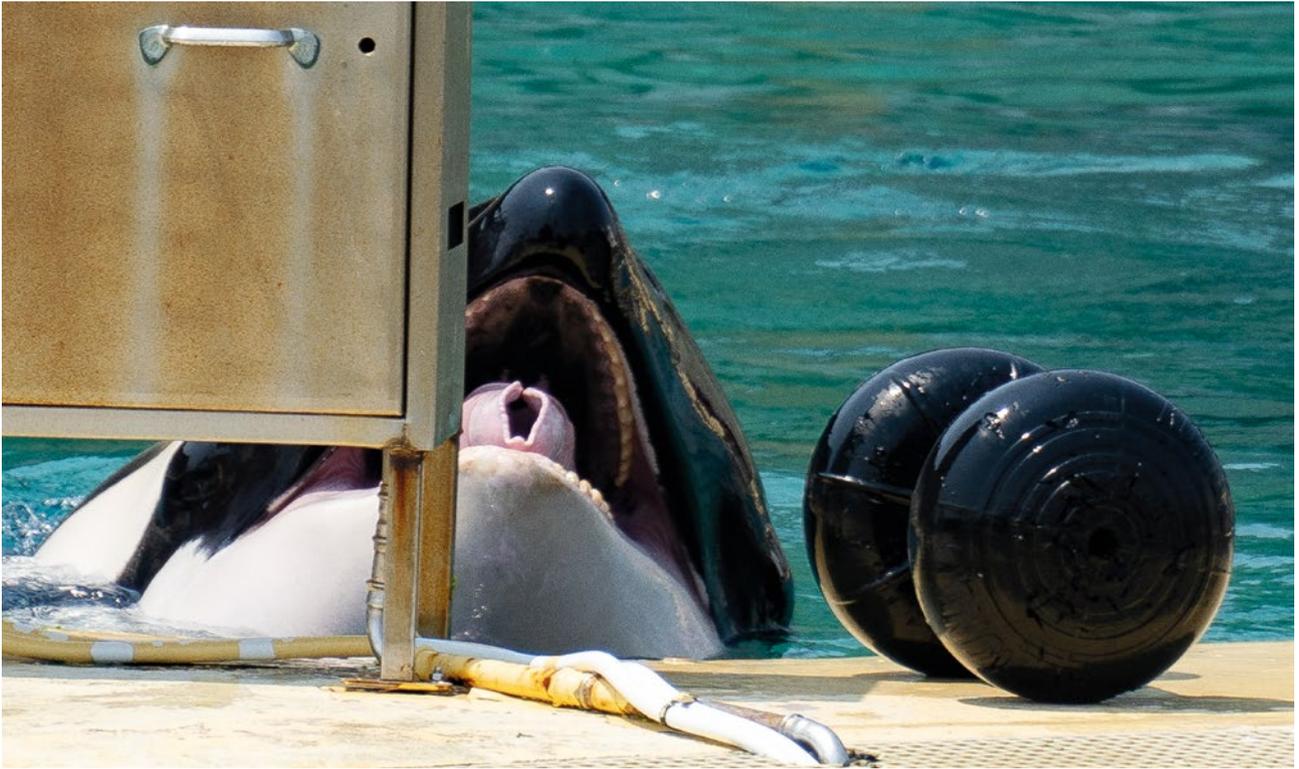


Figure 12. Wikie exhibiting abnormal tongue rolling behaviour. She is 22 years and 16 days old when this photograph was taken on 17 June 2023. Tongue rolling in orca would normally only be expected in suckling calves. Note also the extensive damage to Wikies teeth, the result of another stereotypic behaviour – gnawing on hard surfaces.



Figure 13. Keijo was 9 years, 6 months, 28 days old when this photograph was taken on 17 June 2023. However, he exhibits this stereotypic behaviour of inappropriate and abnormal 'baby' tongue rolling, also whilst holding his head out of the water (again an unnatural and abnormal behaviour). Note also the extensive damage to Keijo's teeth, the result of another stereotypic behaviour – gnawing on hard surfaces. The first three teeth on his lower left jaw (mandible) are drilled out by the trainers because of nerve exposure.

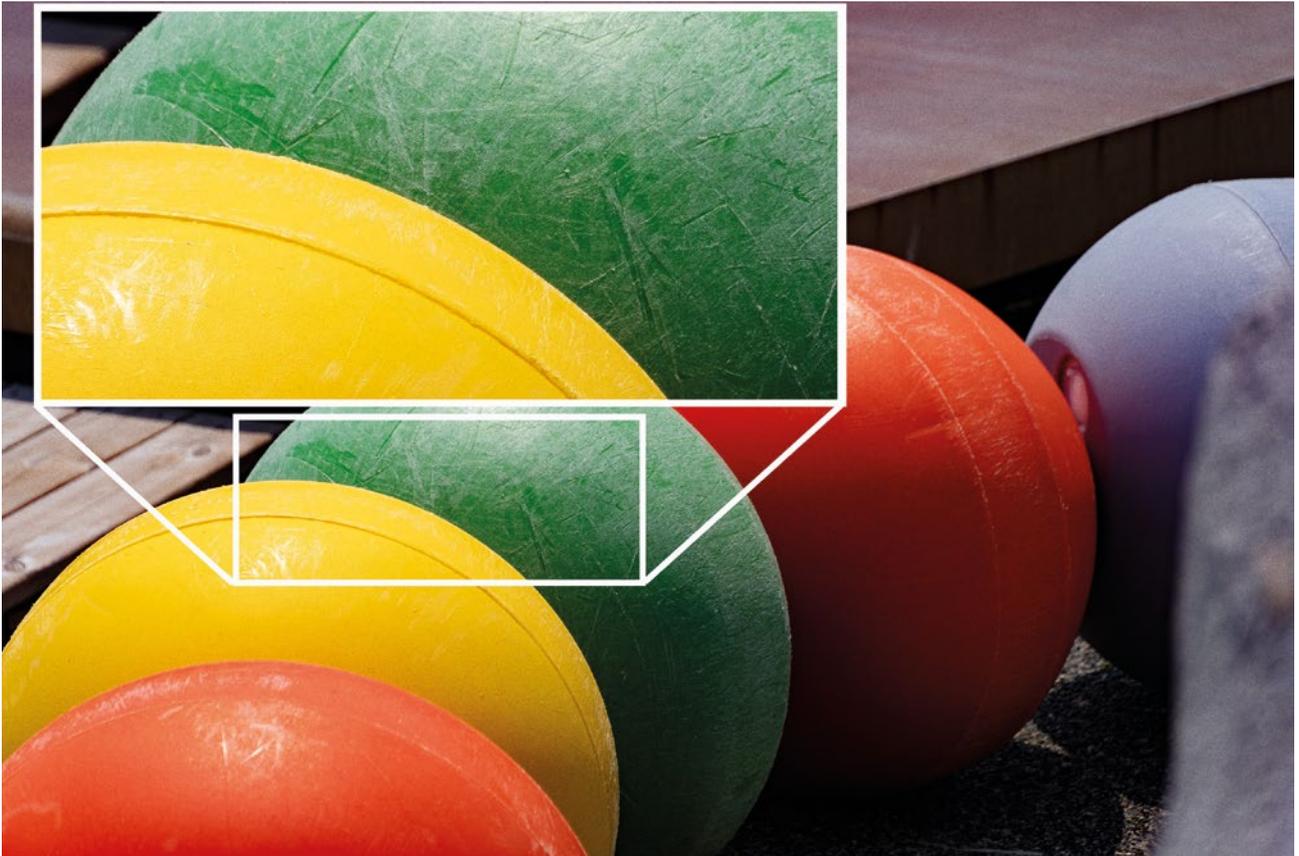


Figure 14. Some of the orca toys beside the tank at Marineland Antibes. Note the 'scrape' marks (insert). A former trainer at Marineland Antibes stated that the orca damage their teeth when they "they gnaw on and play with a number of hard plastic toys which can easily result in broken teeth.

SUB-DERMAL TISSUE DAMAGE / ISSUES

Upon first observing Wikie on 17 June 2023, it was immediately apparent that she was exhibiting subdermal tissue damage. The damage was visible to the naked eye, however I also documented it using an android phone (figure 8) and a Sony Alpha camera and adjusted images clearly illustrate the extent to which this issue is to be found on Wikie (e.g., see Cover image and figures 1 & 8). The sub-dermal tissue damage appeared to be similar in some respects to that I have previously documented on Inouk and Moana, her brother and son respectively (Visser et al., 2019; Visser, 2021a) and which I have documented on her other son Keijo (figure 15).

However, in the case of Wikie, I did not document the 'marbled' tissue as seen on the chin and throat area of Inouk (see figures 6 & 7 in Visser, 2020). Rather, on Wikie the sub-dermal tissue damage, although also found on her chin and throat appeared to be 'smooth' in nature and therefore more similar to that documented on Moana, her son (see Fig. 18 in Visser 2021). However, it is possible that this appearance is the result of the distance from the subject and closer inspection may reveal a more marbled texture to the damage.

Additionally, I note that the pattern of damage is similar to that documented on Moana in July 2021 (see figures 19–23 in Visser, 2021 for comparison). Furthermore, the extent of the damage on Wikie bears a striking resemblance to that documented in July 2017 on an orca in SeaWorld San Diego, California, USA (figures 16 & 17). That orca, known as Katsatka, was euthanised due to an untreatable infection, one month later on 15 August 2017. Appendix 1 contains further images illustrating the sub-dermal and dermal tissue damage seen on Katsatka.

The location of the sub-dermal tissue damage on the mandibles of Wikie are also similar to those documented on Malia, a female orca at SeaWorld Orlando, Florida, USA (figure 18). Former SeaWorld trainers have proposed that these issues were a result of strong doses of drugs that create photosensitivity and phototoxic reactions³. An additional image of Malia is given in Appendix 2. Discussion regarding Dr van Elks' apparent dismissal of the sub-dermal tissue damage documented on the orca held at Marineland Antibes is discussed in Visser (2023).

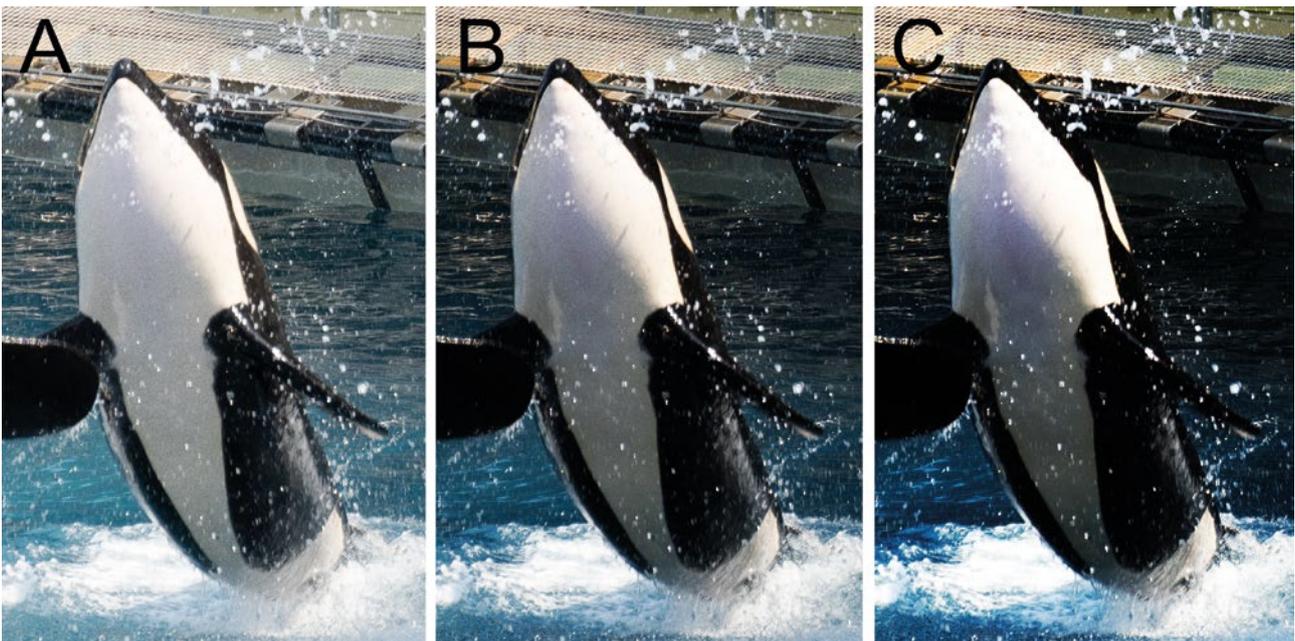


Figure 15. Keijo, photographed on 17 August 2023, from approximately 40 meters away. He exhibits sub-dermal tissue damage which extends anteriorly until just before his flipper inserts. Although this is visible as darker pink areas in all images (A, B, C), it is most obvious in B and C as a dark on the chin/throat area towards the flippers. A. Image not adjusted. B. Image adjusted for brightness and contrast using the photo editing software program Photoshop 2023.

³ <http://voiceofthorcas.blogspot.com/2018/01/phototoxicity-and-is-hybrid-seaworld.html>

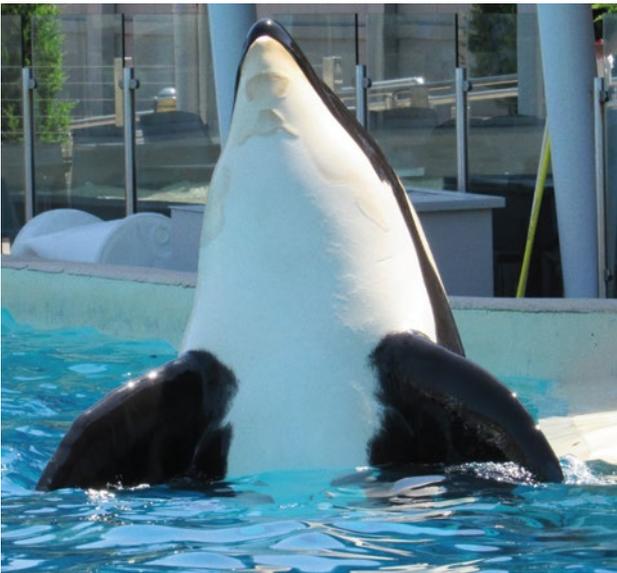


Figure 16. Kasatka in July 2017. This female orca had skin lesions which bear a striking resemblance to those documented on Wikie. Kataska was held captive in SeaWorld San Diego, California, USA and was euthanised due to an untreatable infection, one month after this photograph. Appendix 1 contains further images illustrating the sub-dermal and dermal tissue damage seen on Katsatka. Photo supplied to author.

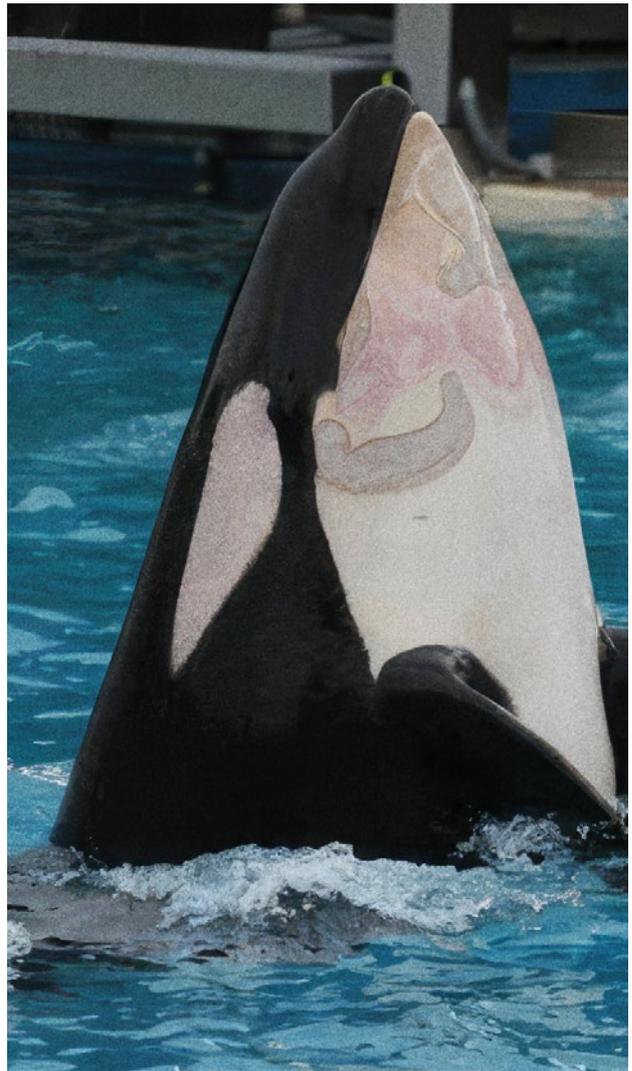


Figure 17. Kasatka in July 2017. Kataska was held captive in SeaWorld San Diego, California, USA and was euthanised due to an untreatable infection, shortly after this photograph. The extent of the sub-dermal tissue damage and the skin lesions are apparent in this image by 'Hunter D' (@hunter.d.photography).

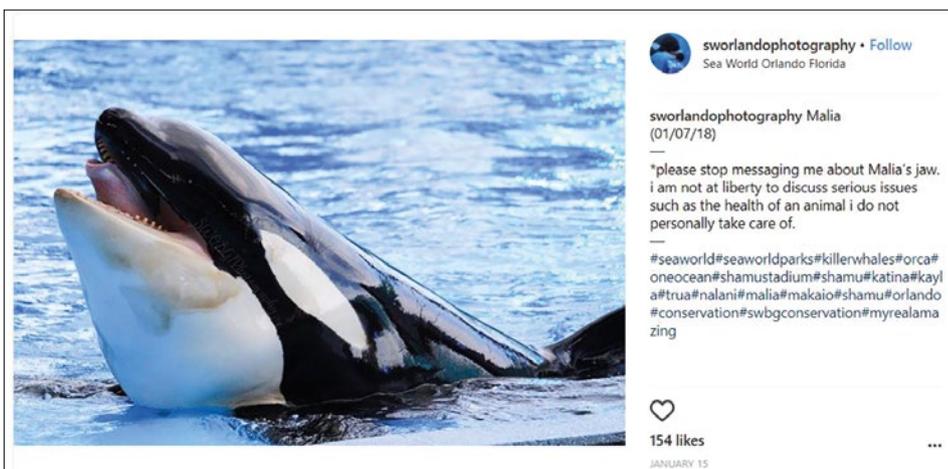


Figure 18. A screen shot from Instagram, of Malia in 2018 at SeaWorld Orlando, Florida, USA. Note the similarities to the sub-dermal tissue damage as documented on Wikie in 2023. Appendix 2 contains a further image of Malia.

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APPENDIX 1. KASATKA (USA)



Figure 1A. A photograph of Kasatka as observed through the underwater viewing area at SeaWorld San Diego, California, USA. Note the delineation of the sub-dermal tissue damage, which is remarkably similar to the location of the sub-dermal tissue damage documented on Wikie (see Cover images and figures 1 & 8).

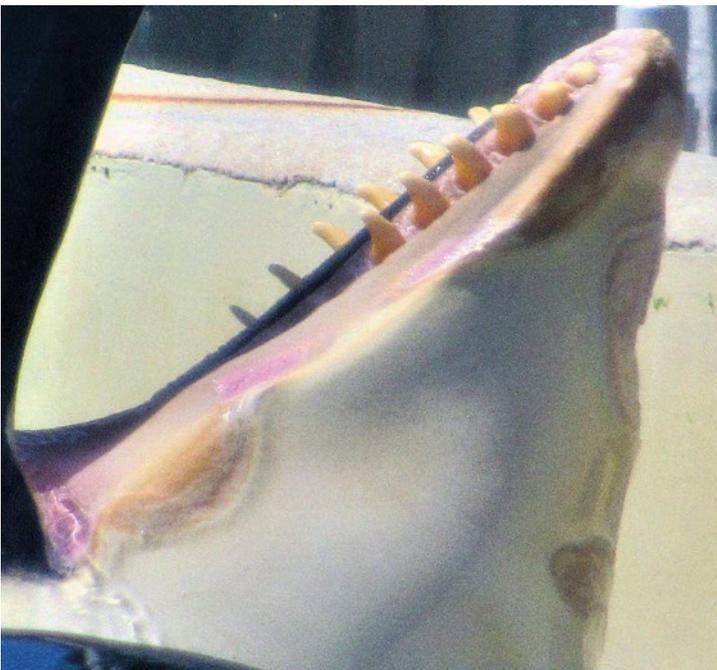


Figure 1B. The extent of lesions became more apparent as the sub-dermal issue that Kasatka was experiencing also became apparent on her skin. Note the delineation of the sub-dermal tissue damage, which is remarkably similar to the location of the sub-dermal tissue damage documented on Wikie (see Cover images and figures 1 & 8).

APPENDIX 2. MALIA (USA)



Figure 2A. An undated and unattributed photograph of Malia at SeaWorld Orlando, Florida, USA. Note the similarities to the sub-dermal tissue damage as documented on Wikie in 2023.

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