Orca Attack

on a Humpback Whale in South Africa

Orca breaches and pounces on a humpback whale that has become separated from its super-pod in South Africa.

Text by Silke Schimpf
Photos by Heinz Toperczer

During the past 24 years of going out to sea as tour operators in South Africa, Silke Schimpf and her husband, Rainer, have encountered orcas hunting several times, killing animals such as seals, dolphins and sharks. But never in their wildest dreams could they have imagined that they and their crew would witness an attack on a humpback whale like the one that took place on 1 December 2023.

It all started on a normal ocean safari day out in Langebaan Lagoon. The aim of the tour was the seal colony at Cape Columbine near Santa Helena Bay, on the western side of the Cape of South Africa, about an hour's drive north of Cape Town.

The sea was flat, there was no wind, and all had gone well for the tourists and crew. En route, we had spotted the usual ocean sunfish (*Mola mola*) and a few dusky dolphins. Upon arriving at the seal colony, some of the guests snorkelled with the friendly seals.

About an hour later, Rainer saw a couple of vessels to the north of us and decided to get closer to find out what they were looking at. It was a research vessel and another tour operator observing a superpod of humpback whales. At a safe distance, he stopped the boat so we could watch the amazing sight of humpback whales feeding.

On the hunt

After observing this action for about an hour, I suddenly saw them and shouted, "Orcas!" Out of nowhere, a pod of about 15 orcas had appeared, heading straight for a pair of fully-grown humpback whales, which had been separated from the rest of the superpod.

We soon realised that this was no game. The orcas were serious and hungry and were trying to feed on one of the humpback whales. Rainer launched a drone and filmed the action for the next 50 minutes.

It appeared that the lead orcas

had selected one of the humpback whales as their prey and were attacking it in continuous waves coordinated from within the pod. It looked very organised and practised. Surely, this was not the first time this pod had hunted, killed and feasted on a humpback whale.

A first

However, it was the first time ever such an event had been witnessed and documented in South African waters. Prior to this event, it was known that orcas hunted whales, but it had never been observed in South Africa. It had also never been filmed from a drone—until now.

Coordinated attack

Again and again, the orcas came in waves to attack, breaching and pouncing on the humpback whale, pushing it underwater and suffocating it by ramming it simultaneously underwater in the throat and mouth. The poor humpback whale had no chance.

For about 45 minutes, the relentless killing blows of the organised orca troop forced the humpback down underwater to the point where it simply ran out of air. It drowned. The orcas then followed the falling humpback down into the depths of the Atlantic Ocean, where we knew they would take its tongue and the soft part of its throat and eat it.

The only evidence we could see of this was the floating blubber, which had come to the surface and was quickly scavenged by various seabirds, such as seagulls, terns and petrels, that had arrived on the scene to take their share of the pickings.

For the next 20 minutes or so, we watched as the orcas surfaced again and again. Once they had had their fill of the humpback whale, they moved as a group in a northerly direction and disappeared as mysteriously as they had arrived.

We were all left in awe.

A pod of orcas made what appeared to be a coordinated attack on a humpback whale that was separated from a superpod of humpbacks near Santa Helena Bay in the Western Cape province of South Africa. Over and over again, the attacks came in waves. Orcas would pounce on top of the humpback whale, pushing it down underwater, as other orcas rammed the humpback's throat and mouth so it eventually suffocated and drowned.

Several orcas coordinated their attack on the humpback.

Orca climbing on top of the humpback to push it down underwater with its weight.

Grief

Then, a pod of humpback whales came back to the scene. Unable to assist and fight the orcas during the attack, it appeared as if they had all come back to pay tribute to their fallen friend, which had saved the rest of the pod of humpback whales by sacrificing itself, so it seemed.

Silently, the humpback whales swam around the kill zone and then finally moved on.

Previous find

Interestingly enough, about four days before this event, we had found a dead humpback whale that was missing its tongue and the lower part of its throat. Already then, we suspected that the orcas were responsible. And now we knew we were right.

Rainer and our company, Expert-Tours, will be on the lookout and will report any further sightings of orcas in the area. In conjunction with Fairy Connections, the legal permit holder for whale watching, Langebaan Divers and Rainer's dive boats, *Expert-Tours 2* and *Spartan*, are legally certified whale- and dolphin-watching vessels in the area. Ocean safaris with diving and snorkelling are conducted properly in accordance with regulations. The tour described in this article was a combination of all these activities. ■

Expedition leaders and guides Silke and Rainer Schimpf run Expert-Tours in South Africa. For more information, please visit: ***expert-tours.de***.

Edited by
Peter Symes

New research reveals how some whales can sing while holding their breath under-water.

PETER SYMES/MIDJOURNEY

How Whales Can Sing Underwater

Scientists have unlocked the mystery of how some whale species are capable of singing complex songs while submerged and holding their breath, a recent study published in *Nature* reveals.

This discovery sheds light on the unique physiological adaptations that allow these marine giants to perform such vocal feats.

The research's primary focus involved examining humpback whales' laryngeal anatomy. Researchers found that specific adaptations in the whale's larynx enable it to produce song even without the continuous passage of air, contrary to what is typically required for sound production in most mammals, including humans.

Breath control and vocalization

The study highlights that whales utilize a unique mechanism that recycles air within their bodies to sustain long, melodious calls. This process allows whales to sing for extended periods—up to 30 minutes at a time—without resurfacing for air. The ability to sing while submerged is crucial for communication, mating and possibly navigation across the dark oceanic depths.

Biological significance

Understanding how whales sing is more than a curiosity. It has significant implications for studying whale populations and their health. Song patterns can indicate the presence, density and behaviour of whales, serving as a crucial tool for conservation efforts. The complexity of whale songs also underscores the cognitive sophistication of these creatures, hinting at a rich social structure and communication system.

The research also addresses environmental concerns, such as noise pollution, which can interfere with whale songs and disrupt their natural behaviours. By understanding the mechanics of how whales sing, scientists can better advocate for marine environments that support healthy whale populations. ■

SOURCE: NATURE

Deciphering the Language of Whales

Research suggests sperm whale clicks may represent a complex language system.

In a pioneering study published in *Nature Communications*, researchers have made significant progress in decoding the communication system of sperm whales, suggesting that their patterns of clicks—known as codas—may be the closest animal equivalent to human language.

The study delves into the sophisticated structure of sperm whale codas, consisting of a series of clicks used by whales to communicate with each other across the vast ocean expanses. By employing artificial intelligence and machine learning techniques, scientists have started to identify specific patterns that could correspond to distinct phrases and sentences, offering unprecedented insights into how these majestic creatures interact.

Complex communication

According to the research, each coda represents a potentially unique piece of information, which might be used to convey complex messages between individuals. These findings highlight the complexity of sperm whale social structures and their communication abilities, which appear far more intricate than previously understood.

The team used advanced algorithms to analyse thousands of recorded codas, seeking patterns and repetitions that might indicate a structured form of communication. This method mirrors techniques used in human linguistics, adapted to handle the unique acoustic characteristics of whale sounds.

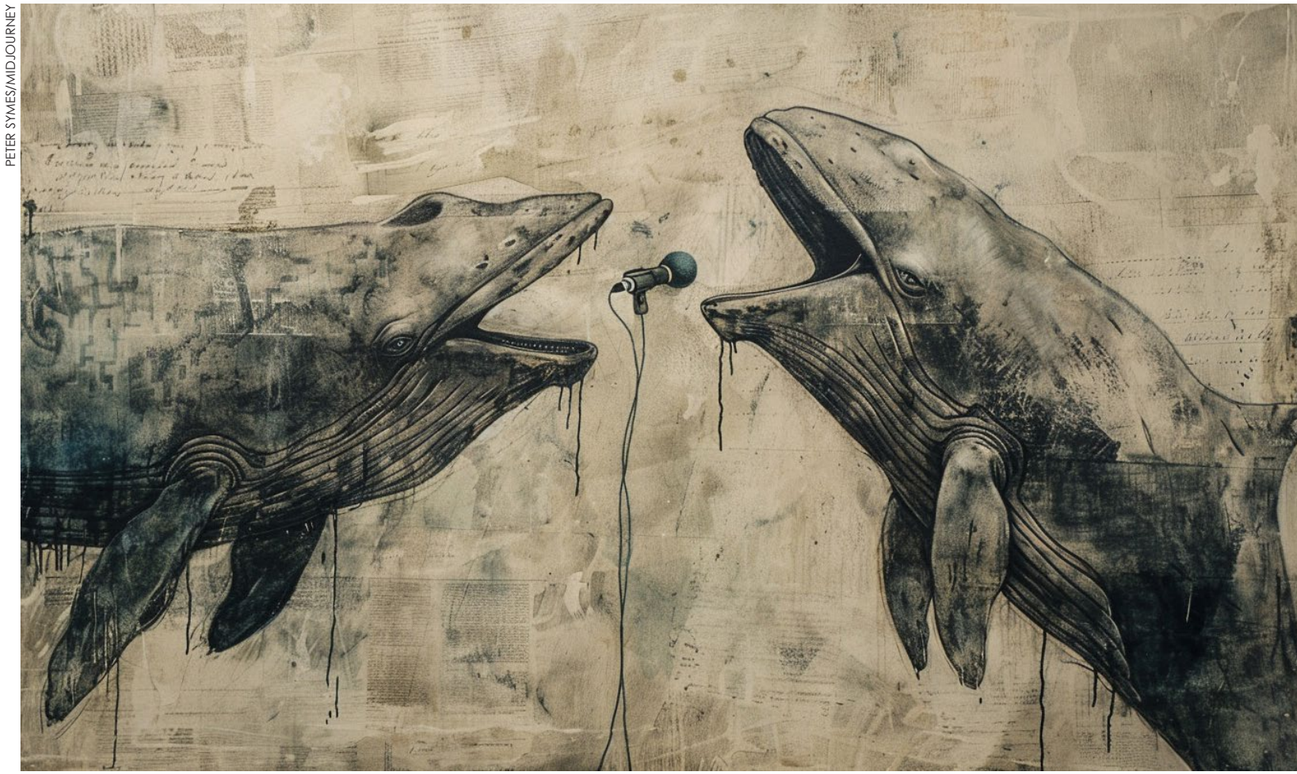
The study's authors are optimistic about the future of this research. They anticipate that ongoing advancements in technology and data analysis will allow for even deeper insights into the communication systems of sperm whales and other cetaceans. This could eventually lead to more effective protection measures and policies to support the thriving of these complex marine societies.

Implications for conservation

Understanding whale communication is not just an academic pursuit. It significantly impacts conservation efforts and our broader understanding of marine life intelligence. By deciphering whale languages, researchers can better predict and mitigate human impacts on whale populations, such as those from shipping routes and underwater noise pollution. ■

SOURCE: NATURE COMMUNICATIONS

PETER SYMES/MIDJOURNEY



Groundbreaking research suggests sperm whale clicks may represent a complex language system.