

A large whale, likely a sperm whale, is shown swimming in the ocean. The whale's dark grey, textured skin is visible against the bright blue water. The image is taken from a slightly low angle, looking up at the whale's body as it moves through the water.

Worth
more
alive



While visitors to Madeira are usually aware of the island's natural beauty and varied tourism offerings, not many know about its long-standing whaling history. In recent years, locals have made it their task to reconcile the past with a sustainable, research-focused whale watching industry. With around a third of all known cetacean species visiting the Madeira archipelago throughout the year, it is direly needed.

Words by Nane Steinhoff

Our boat rocks back and forth as the bright midday sun puts a sparkly sheen onto the calm sea. I listen to the enigmatic sound of small waves hitting the hull and keep eye contact with a curious seagull that has sat next to our boat for quite some time, hoping for one of our lunchtime sandwiches to end up in the water. Nobody speaks as we continue to look out at the horizon for any movement.

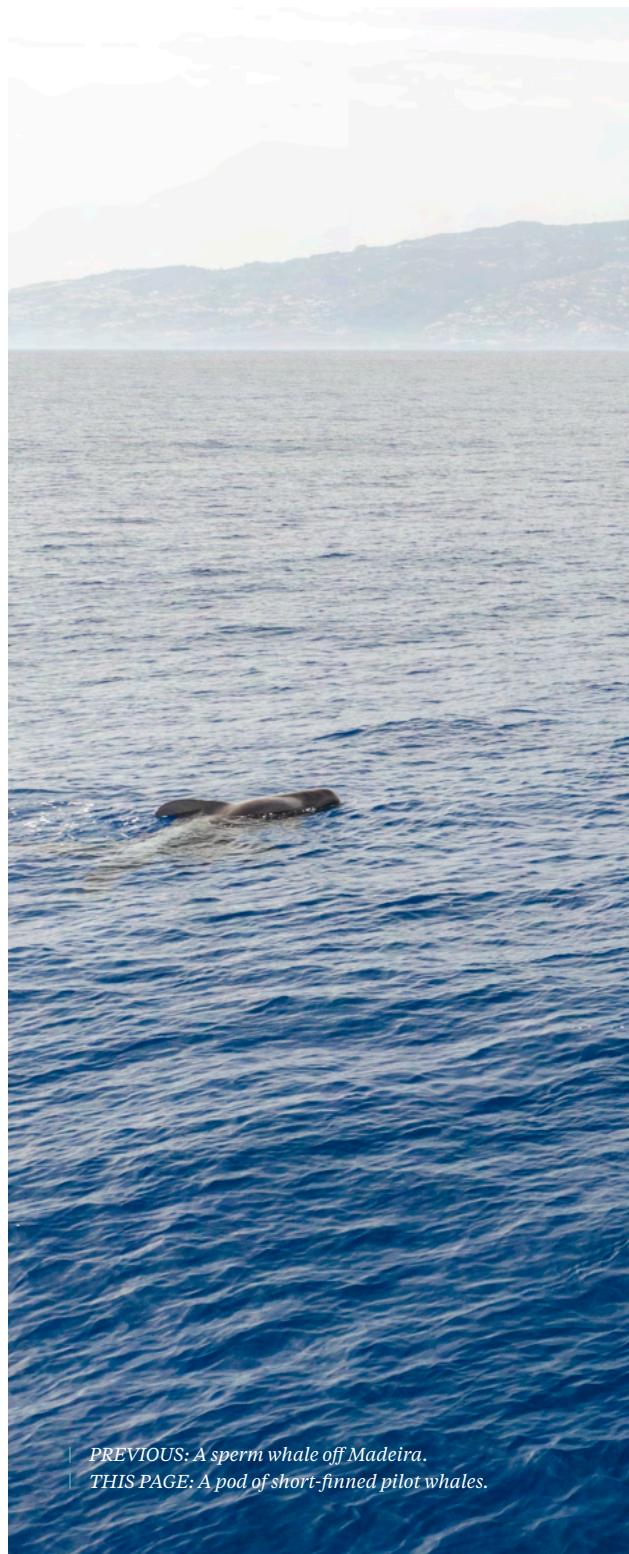
Suddenly, Pedro Gomes, our whale watching guide for the day, jumps up and points towards something. He spotted a glimpse of a short-finned pilot whale, he exclaims. As we slowly inch closer, a pod of around 15 short-finned pilot whales appears all around our vessel. We hear their loud breaths through their blowholes, spot two calves, and are mesmerised by the unexpectedly large cetaceans. “Males can reach up to 7.2 metres in length,” explains Gomes as we take in the peaceful scene of the pilot whales appearing and disappearing around our vessel.

Short-finned pilot whales are one of the resident cetacean species in Madeira which are known to be seen around the year by local dolphin and whale watching tour operators, but they are not the only marine animals that can be found in the archipelago’s waters. Common dolphins, spotted dolphins, bottlenose dolphins, and loggerhead turtles are all species that call Madeiran waters home.

Madeira’s position between the Azores and the Canary Islands in the North Atlantic is also ideal for watching larger whale species pass by on their migratory routes. Just five kilometres off the coast, the ocean depths can reach more than 3,000 metres, and the underwater topography is characterised by steep slopes, underwater canyons, and vast plateaus. This special terrain allows larger cetaceans that would usually be seen in deeper waters to swim close to the island’s coastline.

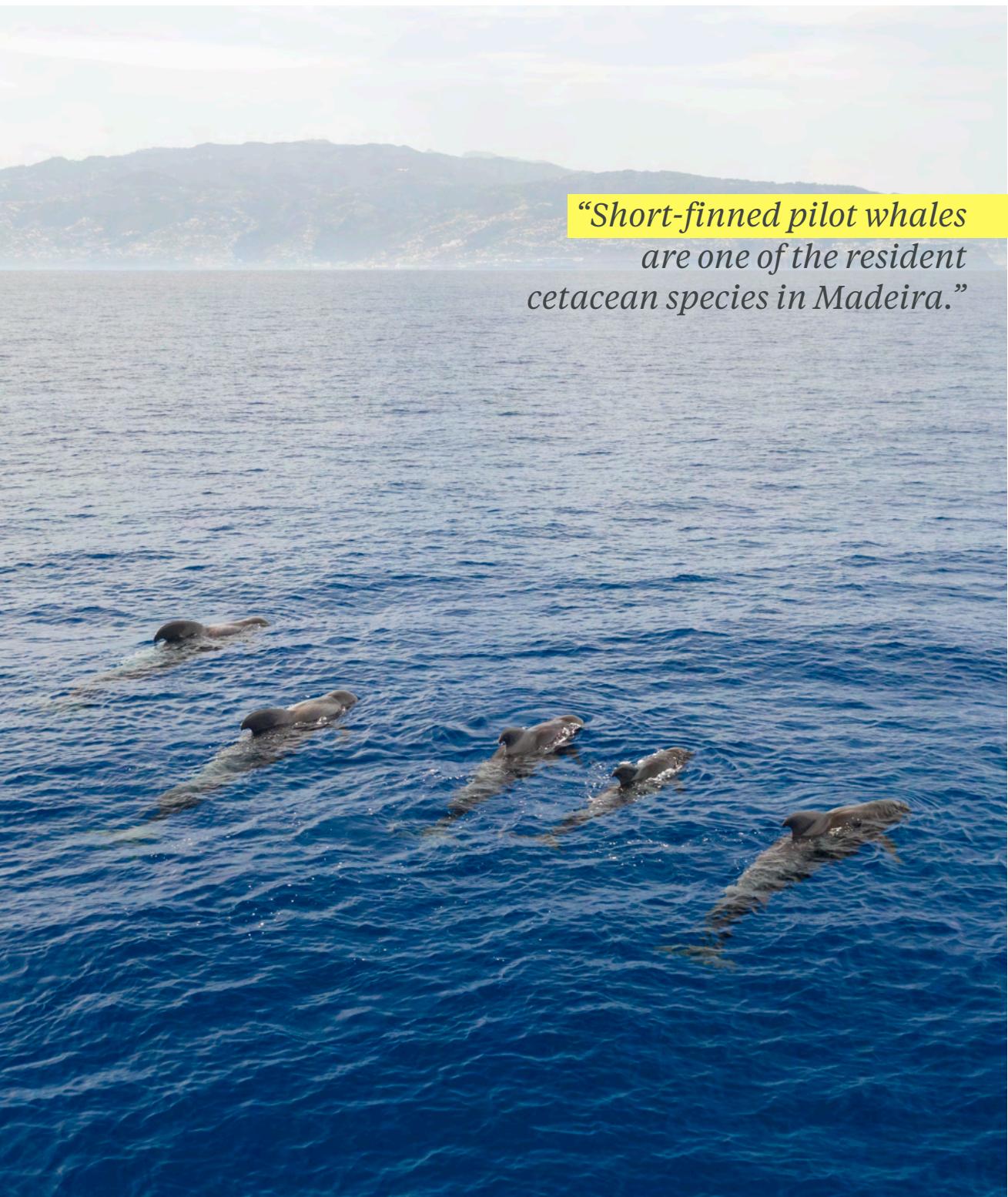
According to the World Cetacean Alliance, Madeira’s waters provide an important habitat for 26 whale and dolphin species which translates to around a third of all known cetacean species worldwide. In recent years, Gomes tells us, frequent visitors to the archipelago include Bryde’s whales in summer and sperm whales throughout the year. Sightings of fin whales, sei whales, common minke whales, and Cuvier’s beaked whales have also been reported. Sightings of blue whales, humpback whales, North Atlantic right whales, and orcas are less common, but still possible.

“It’s difficult to isolate Madeira from other islands in Macaronesia, a group of volcanic archipelagos that includes Madeira, the Canaries, Azores and Cape Verde, since most species live in the entire area,” explains Filipe Alves, researcher at MARE-Madeira, a local non-profit marine research institute. “At least six of the species



PREVIOUS: A sperm whale off Madeira.

THIS PAGE: A pod of short-finned pilot whales.



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Short-finned pilot whales are frequent visitors to the waters off Madeira.



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present in Madeira move between the different archipelagos. That's why research and conservation must be done in partnership with institutes and governments of the whole Macaronesia."

Madeira's long-standing history of marine protection began in 1971 when the Selvagens Islands Nature Reserve was founded. Located 293km from Madeira, the largest MPA in Europe with total protection has become an important refuge to many seabird and whale species and is under jurisdiction of the Madeira Nature Park. The reserve paved the way for the introduction of further MPAs and nature reserves, and Madeira itself has recently been designated as a Whale Heritage Area, a title which recognises outstanding wildlife-friendly tourism destinations. There are only nine other destinations in the world that currently hold this title.

The island's connection with residential and visiting whale species, however, hasn't only been a positive one. Thanks to its strategic location, Madeira has a colourful whaling history that officially began in 1940 with the installation of the first whale lookouts on Madeira and the arrival of two whaling boats and their crews from the Azores, a whaling hotspot at the time.

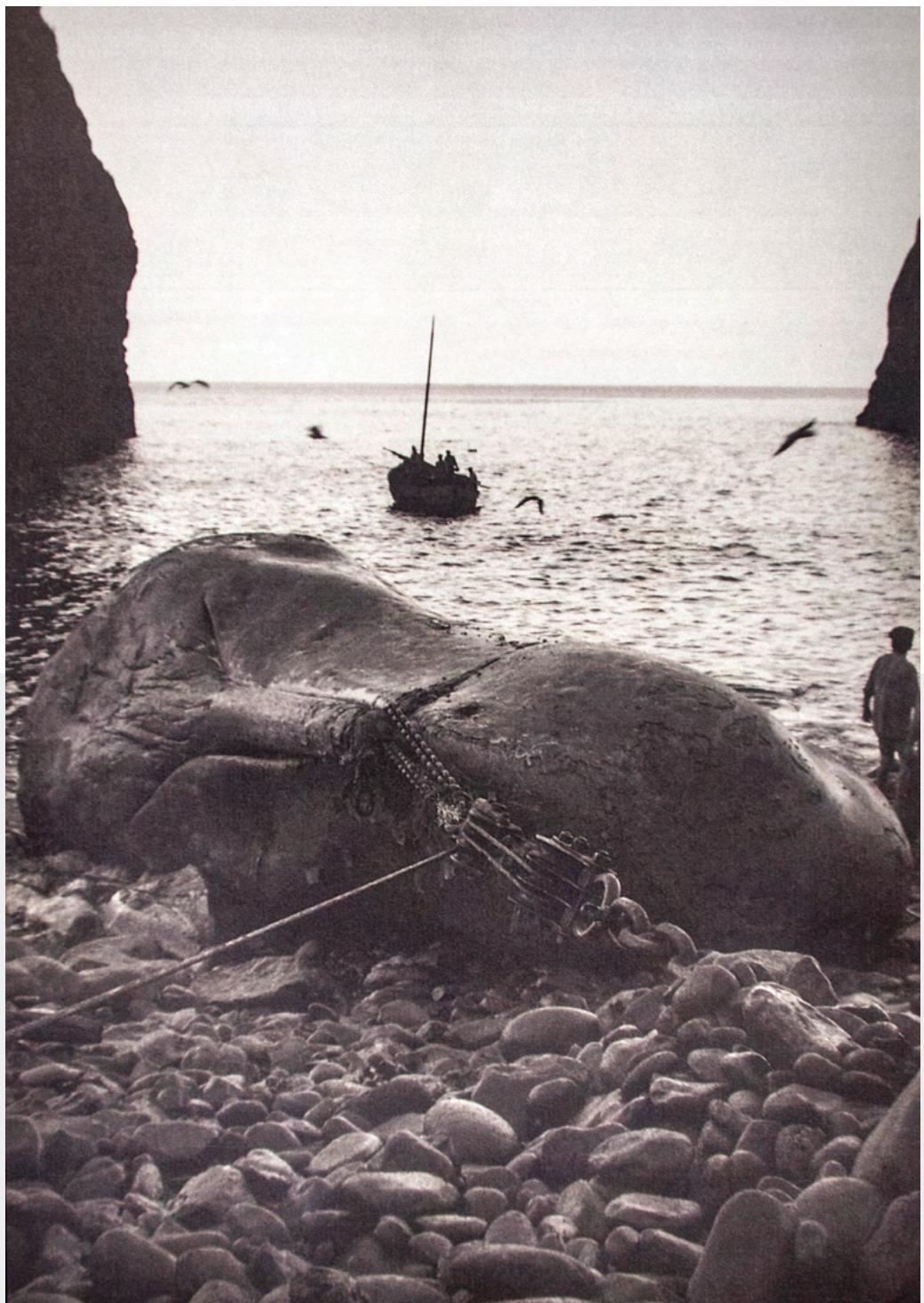
Shortly after the construction of the Pedro Cymbron whaling station, the first sperm whales were hunted off the island in 1941. While whaling activities from 1941 until 1945 were experimental, the creation of the Empresa Baleeira do Arquipelago de Madeira (EBAM) or the Whaling Company of the Madeira Archipelago in English, marked the official start of whaling operations in Madeira on 2 December 1944. The company was awarded an exclusive concession for whaling around the archipelago the following year, while the concession was renewed successively for 10-year periods until the company voluntarily ceased its operations in October 1981.

During the active whaling period, spotters were positioned at the viewing posts that dotted the high mountains around the island. This meant that all ocean areas could be scanned for potential whale sightings. Initially, communications between lookouts relied on using big white sheets or smoke signals. With the arrival of telephones in 1943, the lookouts were connected to EBAM so that the whale spotters were able to communicate directly with each other and the boats out at

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LEFT: A whale skull on one of Madeira's beaches. Photograph taken at the Whaling Museum of Madeira.
RIGHT: A freshly hunted sperm whale gets pulled onto land. Photograph taken at the Whaling Museum of Madeira.







*“Thanks to a protocol
created with local whale
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*A whale and dolphin
watching boat off
Funchal.*





A close-up shot of a short-finned pilot whale.

sea by radio telephone. These improvements made it much quicker to mobilise the whaling boats and hunting sperm whales became more efficient. In the early years, sperm whales were primarily hunted from Porto Moniz and butchered at a rudimentary installation at Ribeira da Janela. In 1942, a new whaling station was created at Funchal/Garajau, expanding the hunt to the south coast of Madeira. These whaling stations and the associated butchering installations operated until the 1950s when all activities were moved to Caniçal.

The first whaling boats were powered by sail and oars in fashion of the Azorean boats that came over to Madeira to establish the local whaling industry. The silent hunts were relatively slow and difficult and were only able to target individual whales.

Through the introduction of motorised whaling boats from 1957, the whaling strategy changed significantly, and Madeiran whaling boats became more efficient. The whaling master Eleutério Reis wanted to kill more animals with fewer whaling boats, so he invented a whaling strategy that broke with the traditional technique introduced by the Azorean whalers. Unlike the traditional technique, the Madeiran technique was based on a noisy approach to the animals.

The sound of the motor was used to form a sound barrier below the water which drove the sperm whales closer to the coast where they could be hunted more easily. Back in the factory, the killed whales' blubber was then melted in pressure cookers to produce two types of oil, while the flesh and bones were turned into flour or 'meal'. Tools and works of art were also be made by the whalers using whale teeth, bones and whale baleen. This ancient art form, also called scrimshaw, reached its peak on board of American whaling ships where the crew used it to spend idle hours during the journeys.

To find out more about the island's rich whaling history, I want to speak to some of the few Madeiran whalers still alive today. I meet 94-year-old Manuel Alves Roque in his home in the small fishing village of Caniçal who was employed as a harpooner. He remembers: "Around 80% of the population in Caniçal were involved in whaling activities back then. It was hard work. Our salary was dependant on how many whales we would catch. The more oil barrels we could fill, the better we got paid. In later years, fewer and fewer whales came to Madeira so the whaling operations stopped and most whalers turned to normal fishing activities, agriculture, or



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Two sperm whales swim off Madeira.

the construction industry." He continues: "When we caught a whale, it usually started slapping its tail on the surface which would attract other whales to come. We then drove them towards shore, so the entire group was easier to catch. On one occasion, we caught around 42 sperm whales in total. The sea turned red. We worked for 8 days around the clock to cut this group up." He tells us that the primary target of the whalers were sperm whales, but that they caught the occasional fin and right whale too.

In 1981, EBAM voluntarily ceased operations as the demand for whale meat fell, and oil prices went down. Synthetic oils became popular, so the industry wasn't lucrative anymore. During the 40 years of whaling with harpoons in Madeira, around 6,000 cetaceans were killed - an average of 150 individuals annually, according to an estimation by a local whale watching company.

As part of my time on Madeira, I'm invited to meet Luís Freitas, head of the Science Unit at the Whaling Museum of Madeira in Caniçal. The interactive museum reveals fascinating insights into the archipelago's long-standing whaling history through 3D videos, images, original whaling boats, life-size whale models, and scrimshaw art, while cleverly forming a bridge between Madeira's past and present.

"The museum was originally set up in 1990 to honour the whalers, preserve what was left of the whaling history of Madeira, and to transmit knowledge about the whales," explains Freitas, adding: "The original museum was located in the heart of Caniçal and was really small. Because the space wasn't that big, information about the whales was scarce. What we tried to do here in our new location that opened in 2011, was to give both the whaling history and cetacean species some spotlight. Our concept combines two rooms - one is looking at the past, and one is looking towards the future."

The work of the museum, however, goes far beyond equipping the exhibition rooms. Shortly after my arrival, Freitas takes me down to the museum's ground floor where vast laboratories are located. In addition to documenting the whaling history of Madeira, the museum works on numerous scientific research and conservation projects, he tells me.

"Our science team monitors cetaceans around the island and uses the collected data to give advice to the government in terms of measurements. As an example, our data helped establish the whale watching legislation for Madeiran waters. We also study human activities and interactions with cetaceans and try to understand the seasonal movements of the different species that use the

archipelago's waters," Freitas explains. "We also have more behaviour-focused work for which we use biologging, deploy transmitters and so on, to find out more about the species," he adds.

As Freitas leads me into a white, sterile room with an odd smell, he says that the museum's science department puts special emphasis on understanding the cause of death of stranded animals: "We want to know whether the death was caused by a ship strike or the ingestion of plastic, for example. So, when a dead marine animal gets found, we bring it here to dissect and analyse it."

The collected data not only helps update the museum's collection, but also gets funnelled into the museum's educational department. "We have teachers coming here to work. They sit in the offices upstairs where they filter all of this information into curriculums that are appropriate for all ages, from kindergarten to the 12th grade. You basically have science feeding education and museology here."

As I walk out the museum, I look at the steep characteristic cliffs on my right, while gazing across the harbour of Caniçal. In this moment, it's hard to imagine that this peaceful town was once at the epicentre of whaling. Even though whaling is now strictly forbidden around the archipelago, remnants of the whaling period can still be found across Madeira. The old whale spotting posts, for example, are still used today - not by whalers, but by whale and dolphin watching companies and researchers that hope to help protect the many resident and visiting cetacean species.

"Thanks to a protocol created with local whale watching companies, it is now possible to collect plenty of useful information that is extremely valuable since these companies are in the water every day," says Filipe Alves. "We can often identify individuals by photos taken on these ecotourism tours, and their reports can help detect the presence or absence of certain species. Additionally, most of these companies have biologists on board which makes the information flow easier between companies and researchers," he adds.

Since whaling ceased in Madeira, the island has moved from hunting whales for profit to protecting them. The whale watching industry is rife, and local operators make sure to not only act responsibly, but to also help advance research objectives.

While there is no doubt that sperm whale numbers have been significantly reduced by the intense hunting activities, the Madeiran community has managed to move towards present-day conservation and appreciation of the diverse fauna. 