

# Sea Watcher

*For members of the Sea Watch Foundation*

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# Sea Watching Overseas: Whale Watching in Madeira

*Luís Freitas, Head of Science at the Madeira Whale Museum, shares his favourite global marine mammal hotspot...*

**M**y passion for the sea started early on, as I looked at the vastness and deep blue colour of the Atlantic Ocean from the cliffs of Madeira, the island where I was born. Madeira is the main island of the Madeira archipelago. It is located c. 700 km west of Casablanca (Northwest Africa) and not far away from the entrance of the Mediterranean Sea. Besides Madeira, the archipelago consists of Porto Santo, and the Desertas and Selvagens islands. The last two are land and marine nature reserves.



Madeira island is the visible part of a mountain that rises roughly 7,300 m from the sea floor and reaches, at its highest peak, 1,863 m above sea level. Despite its small size (59 x 23 km), the mountainous landscape with its green valleys cutting deep into the heart of the island, makes it seem several times bigger.

The Madeira Laurisilva forest covers some of those valleys. This is an ancient laurel forest, a type long extinct in southern continental Europe, and is a UNESCO World Heritage Site. The green of the mountain and the blue of the ocean are hypnotising, especially when seen from the sea. Maybe this is why Madeira is known as the 'pearl of the Atlantic'.

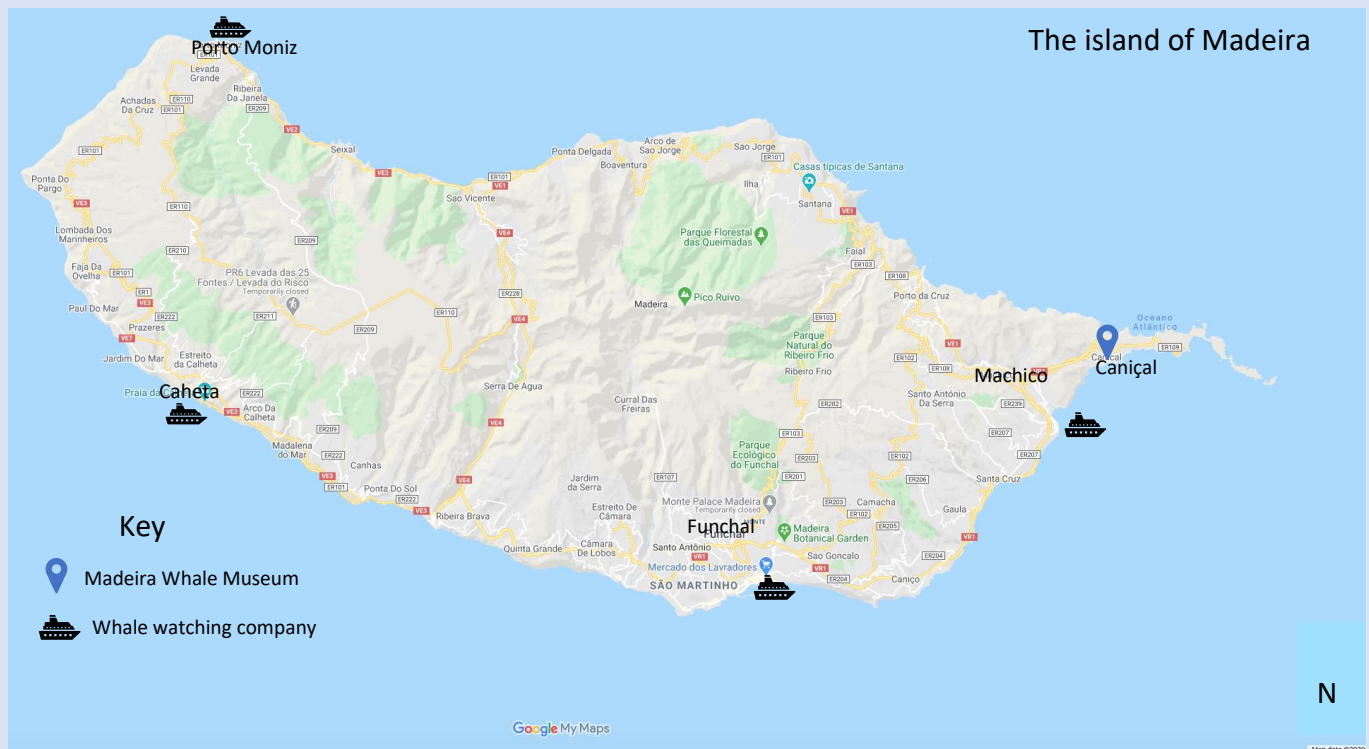




*The north coast of Madeira island, seen from the sea*



*A view of a valley with the Laurisilva forest*



*The capital of Madeira, Funchal city, seen from Cabo Girão, a promontory 580 m high*

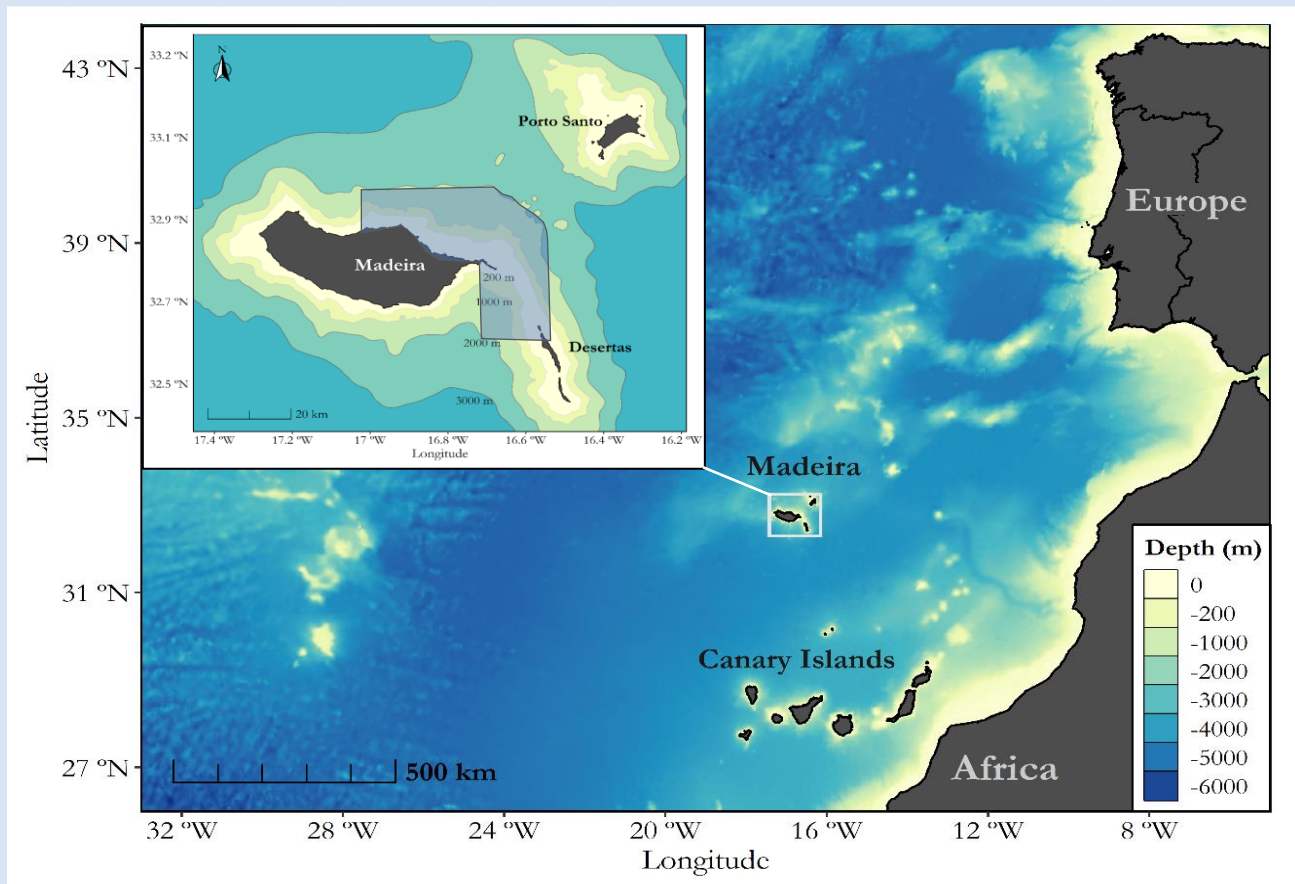


*A 'til' tree (*Ocotea foetens*), found among the trees of the Laurisilva forest. It can live for hundreds of years; many on the island date from before 1420, when the island was discovered*

Photo credits: L Freitas

The waters around the islands are home to many subtropical marine species. Some are permanent residents, including a colony of **Mediterranean monk seal**, **bottlenose dolphins** and **short-finned pilot whales**. Others, including many cetacean species, are occasional visitors, passing by on their migrations or as they hunt for food. The volcanic nature of these oceanic islands, with their steep

underwater slopes and deep waters close to shore, means that you can see both coastal and deep-water species of cetacean in a small area, relatively close to land. Furthermore, its subtropical location, with water temperatures ranging from 18° C to 24° C places the archipelago at the southern limit of the distribution range of colder water cetacean species and the northern limit of warm water species.



*The Madeira archipelago, its composition and bathymetry. The light gray shaded area is the whale watching exclusion zone (see page 19)*

## Species you might see

Twenty-eight species of cetaceans have been recorded in the waters of the Madeira archipelago. Among the most common species you might see are **bottlenose dolphins** and **short-finned pilot whales**. Both are present all year round, as visitors and as residents. You are more likely to see **bottlenose dolphins** in the shallower waters closer to shore, and in the channel between Madeira and the Desertas islands. Look a little further out to sea to spot **short-finned pilot whales** – they mostly inhabit a small area of deeper waters around 2,000-2,500 m depth, southeast of the island, not far

away from the bottlenose dolphins. In fact, it is not uncommon to see some bottlenose dolphins in mixed groups with pilot whales. On the other hand, the **Atlantic spotted dolphin** and **common dolphin** are seasonal visitors, and tend not to overlap. Spotted dolphins occur mainly in the summer and autumn, and common dolphins generally in winter and spring. Although you can sometimes see these dolphin species with the naked eye from land, they tend to be spread throughout a wider range of depths than the bottlenose dolphin.



**Bryde's whales** visit around the same time as the Atlantic spotted dolphins. If you are lucky you may spot them from land, as they are sometimes seen close to shore, on their own, in mother-calf pairs, or in gatherings of a few animals, to feed.



Three sperm whales resting on the surface a few kilometres from Cabo Girão promontory, near Funchal city

Photo credit: Joan Gimenez © Museu da Baleia da Madeira

**Sperm whales** are also common in Madeira coastal waters throughout the year, including single males, small groups, and, more rarely, matriarchal groups that can reach thirty or more animals. However, these animals only stay from a few days to a few weeks feeding, resting and socialising as they wander the Atlantic Ocean, possibly migrating between the Macaronesia archipelagos of Azores, Madeira and the Canaries. They were found in such large numbers in the past that they sustained a coastal artisanal whaling operation from 1941 to 1981 in the archipelago.

Some of the scenes from the 1956 film "Moby Dick", directed by John Huston and with Gregory Peck as Captain Ahab, were recorded off the southeast coast of Madeira island close to Caniçal village, from where the small whaling wooden boats operated.

Located in Caniçal village is the Madeira Whale Museum (MWM; [www.museudabaleia.org](http://www.museudabaleia.org)).

Here you can find out more about the historical and cultural heritage of the whaling activity in the archipelago. The museum also promotes the conservation of cetaceans through scientific research, education and awareness.

Besides sperm whales and pilot whales, you may find other deep diving species such as the **Blainville's beaked whales**. They are regularly seen throughout the year in the waters around Madeira, but they are not easy to spot, because of their inconspicuous behaviour.



A Blainville's beaked whale

Photo credit: Elena Gutierrez © Museu da Baleia da Madeira

A Cuvier's beaked whale



Photo credit: Joan Gimenez © Museu da Baleia da Madeira

Less likely to be observed, but still present occasionally, are **Cuvier's beaked whales**.

This species is seen less frequently than Blainville's beaked whales and other cetacean species. This could be because of its lower number, more offshore distribution and /or shy behaviour.

If you are lucky, you might even see **pygmy sperm whales**. They are also deep-water specialists.

Other species have an occasional presence in these waters. You may see **fin whale** – their numbers peak in March and April as they pass through Madeira on their northward migration - or **striped dolphins** and **false killer whales**; they can be seen irregularly throughout the year. On the other hand, **rough-toothed dolphins** and **Risso's dolphins**, visit only in summer.

In my thirty years of research on marine mammals in Madeira, mostly studying cetaceans at the

MWM, I never cease to be surprised once in a while by unusual and spectacular encounters. These include: a beaked whale together with a pod of short-finned pilot whales; dolphins bow-riding a Bryde's whale; and four sightings of individual dwarf sperm whales in a single hour. Among the rarer species I have encountered are sei whale, minke whale, blue whale, Sowerby's beaked whale, Gervais' beaked whale, a pod of killer whales, Fraser dolphins and pygmy killer whales.

Dolphins bow-riding a Bryde's whale off the south coast of Madeira, with Cabo Girão promontory in the background



Photo credit: L. Freitas



## Getting out to sea

In my experience, there is a good chance that someone going out at sea will return with good memories, either from encounters with wildlife (cetaceans, sea birds, sea turtles, even the elusive monk seal) or simply the scenery, enhanced most of the times by the mild weather, sun and comfortable air and water temperatures. To have a good chance of seeing the deeper-diving species, as well as to get a better feel for the archipelago,

you will need to get out to sea. There are several 'whale watching' companies operating from different harbours – but make sure they are licensed (see box below). Although free swimming with cetaceans is not allowed, you can book underwater observations of common dolphins and Atlantic spotted dolphins only. Up to four people are allowed in the water at the same time, connected to the boat by a rope.

## Whale watching boat trips – a historical background

*Whale watching boat trips started gently and opportunistically 25 years ago on Madeira island when Peter Bristow, the owner of a big-game fishing boat ('Catherine B'), promoted trips to see cetaceans as a way of complementing the fishing activity.*

*In 2004, the Madeira Whale Museum (MWM) promoted a whale-watching voluntary code of conduct that was adopted by most companies operating at that time. However, as whale watching grew in popularity, the MWM then proposed to the government that binding regulations should be introduced, and provided scientific advice towards that goal.*

*In 2013, regional legislation came into force, regulating not only the observation of cetaceans but also of other marine vertebrates such as sea turtles and sea birds. The legislation included the Mediterranean monk seal, in order to minimise negative interactions with this rare and highly protected species.*

*As a result, a maximum number of whale watching boats allowed to operate per harbour was established and also the maximum number (3) of trips each boat could do per day. A time limit to be with the animals and an exclusion zone (see page 16) were also established to minimise the impact on crucial habitats of the bottlenose dolphin and short-finned pilot whale, both species with resident groups.*

### Suggested Whale Watching Companies

#### **Calheta, (Southwest Madeira)**

Lobosonda ([www.lobosonda.com](http://www.lobosonda.com))

H20 Madeira ([www.h2omadeira.com](http://www.h2omadeira.com))

#### **Funchal (the island capital in the South of Madeira)**

VMT Madeira ([www.vmtmadeira.com](http://www.vmtmadeira.com))

Magic dolphin ([www.magic-dolphin.com](http://www.magic-dolphin.com))

Rota dos Cetáceos ([www.rota-dos-cetaceos.pt](http://www.rota-dos-cetaceos.pt))

#### **Machico (Southeast Madeira)**

Scorpio ([www.scorpiomadeira.com](http://www.scorpiomadeira.com))

#### **Porto Moniz (Northwest Madeira)**

Madeira Wild Blue ([www.madeirawildblue.com](http://www.madeirawildblue.com))

*Please note: from time to time there are companies that try to operate without a licence. We recommend that you check that the boat you choose has the flag of a licensed whale-watching operator and that it is operating from the designated harbour.*

### Further reading

Freitas, L., Dinis, A., Alves, F., and Nóbrega, F. (2004) Cetáceos no arquipélago da Madeira, Edição Museu da Baleia, 108p. ([www.museudabaleia.org/images/pdf/Freitas et al 2004 - Livro Cetáceos Madeira.pdf](http://www.museudabaleia.org/images/pdf/Freitas%20et%20al%202004%20-%20Livro%20Cetaceos%20Madeira.pdf))

Freitas L., Dinis A., Nicolau C., Ribeiro C., and Alves F. (2012) New records of cetacean species for Madeira Archipelago with an updated checklist. *Bol. Mus. Mun. Funchal*, **62** (334): 25 - 43 ([www.museudabaleia.org/en/science-in-museum/whales-and-dolphins-in-madeira](http://www.museudabaleia.org/en/science-in-museum/whales-and-dolphins-in-madeira))