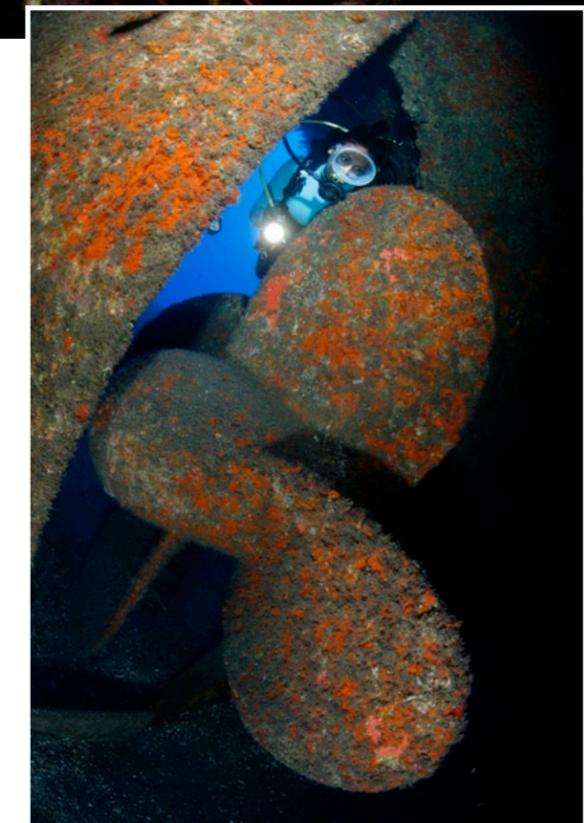




The Oceanic Archipelago of
Madeira

Text and photos by Nuno Sá



The oceanic archipelago of Madeira lies approximately 1,000km southwest of Lisbon, right in the middle of the Atlantic Ocean. Located between latitude 30° and 33°N, quite close to the Strait of Gibraltar almost the same as Casablanca (Morocco). Seven islands form the archipelago but only the biggest two, Madeira and Porto Santo, are inhabited and have a harbor and airport. The remaining islands and islets are divided in two small groups, the Desertas and the Selvagens, and are natural reserve parks due to their immense biological wealth.

Large anemone and diver at Baixa do Lobo

Geographically, located in a subtropical region and conditioned by the southern branches of the Gulf Stream, the archipelago has moderate climate all year round, with no great yearly thermal amplitudes. Average air temperatures range from a maximum of 23°C to a minimum of 15°C, and water temperature hovers around 22°C in summer, gradually lowering to 18°C at the end of the winter.

As in most oceanic archipelagos, the sea topography lacks a continental shelf, reaching high depths at relatively short distances from the shores. These characteristics allow the sighting of ocean specimens such as large pelagic fish, manta ray, turtles and marine mammals in diving spots close to the shore.

The archipelago of Madeira has deep blue waters, with excellent visibility (20 to 35m on a typical summer dive) and



Hikers enjoy the rugged Madeira landscape (above); Diver explores the wreck of *Bowbelle* (left)
PREVIOUS PAGE: Huge school of blue-striped snapper with diver at Garajau Natural Reserve



is home to some 360 marine vegetable species, together with 550 marine fish, 21 marine mammals and an enormous amount of invertebrates. The biodiversity of species that co-inhabit the waters of Madeira is unique worldwide. Being an oceanic archipelago, Madeira has not only Atlantic varieties of species, such as large pelagic fish, but also a wide-range of species from the North Sea to the Mediterranean, as well as some tropical species that have Madeira Island as their northernmost distribution limit.

Diving
Madeira Island offers a wide range

of diving sites, including several wrecks, cave dives and coastal dives. However the top dives on this island are concentrated in a small area called Garajau Natural Reserve. This protected area was the first exclusively marine reserve created in Portugal 23 years ago. Since then, the area has become populated by a wealth of flora and fauna.

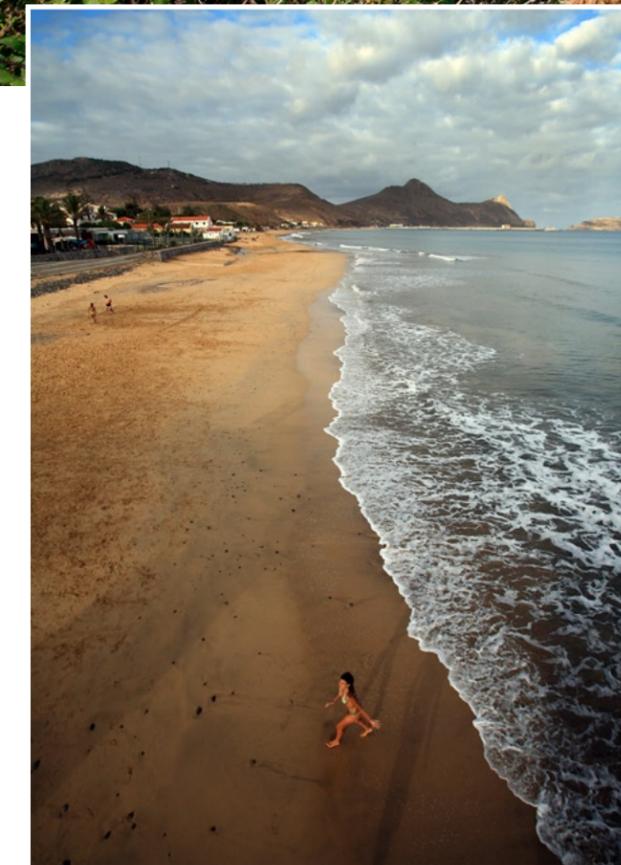
This 376-ha (929-acre) natural reserve is located on the south coast of Madeira, not too far from Madeira's capital, Funchal, and has several diving sites marked by yellow marker buoys. Some of these dives can be made directly from the coast, with some diving



CLOCKWISE FROM TOP LEFT: Diver explores cave at Roca Mar; Seahorse at Reis Magos; Dusty grouper and diver at Garajau; Diver and sabre squirrelfish at Garajau



The beautiful Madeira coastline; Diver and school of blue-striped snapper at Garajau (right)



Beach at Porto Santo

centers offering direct access to the dive sites from the bathing areas of hotels.

Dives in the reserve include several cave dives, including a 35m-long cave (gruta da ponta da Oliveira) with a large air pocket inside where divers can reach the surface. It is often visited by the world's most endangered sea mammal—the monk seal (*Monachus monachus*).

However, the Garajau dive site is by far the most visited of them all, and definitely the top dive site on the island. Depth starts at about 15m but quickly descends to about 30m. During the summer time, the reserve comes alive with shoals of pelagic fish, which pass through the archipelago with the Gulf Stream, such as white trevally or guelly jack, yellowmouth barracuda, almaco

jack and greater amberjack and bastard grunt. Also towards the end of the summer, the graceful and elegant mobula rays can sometimes be seen slowly gliding over the divers.

Here you can also encounter large specimens of barred hogfish and comb grouper apart from all other species that are abundantly present at any dive such as several species of moray eels and colorful anemones. However, a particular species captures the special attention of most divers—the dusky grouper, considered the symbol of the Garajau Reserve.

Dusky groupers at Garajau are very large—they can weigh up to 60kg—but extremely playful and curios, usually following the divers along the whole dive. Due to their longevity—they live up to 50 years—and hospitality, regular visi-





tors can recognize particular individuals year after year, such as Malhado (Spotty)—Garajau's oldest, largest and most famous grouper. Three or four dusky groupers can be seen on a typical dive at this site, many times competing for the divers' attentions and usually swimming beside the dive masters that have know them for several years.

Also fun to observe are the large colonies of brown garden eels that in some places cover the sand bottom looking at the divers and quickly vanishing in the sand as they approach.



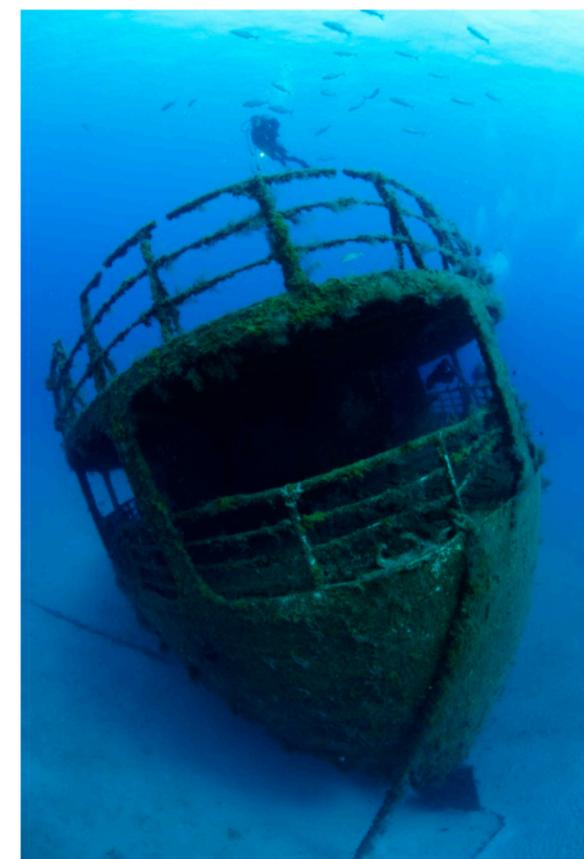
Porto Santo

Just 27 miles off the high rocky cliffs of Madeira, lies the small island of Porto Santo. Although close together these island's landscapes could not be more different, as Porto Santo is a small island with a large coastal plane bathed by five miles of golden sandy beaches.

Less touristic than Madeira Island, it has a calm and easygoing trend to it and is also home to some of the archipelago's

best dives and most pristine waters. With daily three- to four-hour-long boat rides and flight connections, visiting both islands for a one-week dive trip is certainly possible and recommended. Porto Santo also has a large marine protected area, with several dive sites in its borders. Distances to dive sites are, however, larger, and a short boat trip to the main dive sites is necessary.

Porto Santo is home to a huge biodiversity of marine species, which ranges from



CLOCKWISE FROM TOP LEFT: : Diver at *Pronto* wreck; Diver at Desertas Pedregal; The *Madeirense* wreck at Porto Santo; Cleaner shrimp services moray eel at Roco Mar; Fangtooth moray eel at Roco Mar



Madeira

CLOCKWISE: Rugged coastline of Madeira; Map of Madeira archipelago; Diver and big red seastar; Diver on *Bowbelle* wreck

dusky grouper, comb grouper, moray eels to large-sized common and round stingray, shoals of yellowmouth barracuda swimming in circles, white trevally, almaco jack and skipjack tuna.

The best and most well-known dive site in Porto Santo is without a doubt the *Madeirense* shipwreck. This dive alone makes a trip to this island worthwhile. The ship *Madeirense*—a ship that was used for decades to connect Madeira to Porto Santo—was sunk on purpose for diving in the year 2000.

Nowadays, it is filled with a panoply of diverse species from resident dusky groupers to large shoals of other fish. As in Garajau

Reserve, these groupers are very playful and enjoy the company of divers. As soon as divers start the decent to the wreck that lays verti-

cally on the 34m-deep sandy bottom, large schools of fish can be sighted and Big Lips—the wreck's most curious grouper—usually leaves the wreck to meet the divers as they descend.

When approaching the top of the ship, we can usually sight large shoals of almaco jack, white trevally and yellowmouth barracuda all concentrating on the capture of small bogue (*Boops boops*) that wander in their thousands around the wreck. Exploring the inner areas of the ship's bow, we may find other less curious dusky groupers and comb groupers always keeping an eye on the sandy bottom, where resting common stingray and spiny butterfly ray are usually sighted.



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CLOCKWISE FROM LEFT: Squat or sexy anemone shrimp, *Thor amboinensis*, at Roca Mar; Diver spies large triggerfish at Mamas; Nudibranch at Roca Mar

Desertas and Selvagens Islands

Desertas Islands are a group of three major islets located 22 nautical miles away from Funchal and have been a natural reserve since 1995. Visiting these islands is possible with some dive centers and is a three-hour trip from Madeira Island.

The protection of the Desertas Islands and the launching of the natural reserve was mainly caused by the need to create conservation measures for the monk seal, whose population was in danger of extinction in Madeira. This species, classified as threatened (in critical danger) by IUCN, is the rarest seal in the world but can still be sighted on these islands. Its population in the archipelago of Madeira seems to be recovering now. It is currently estimated at around 25–35 specimens. Increase in population tends to increase the distribution area, which now includes some

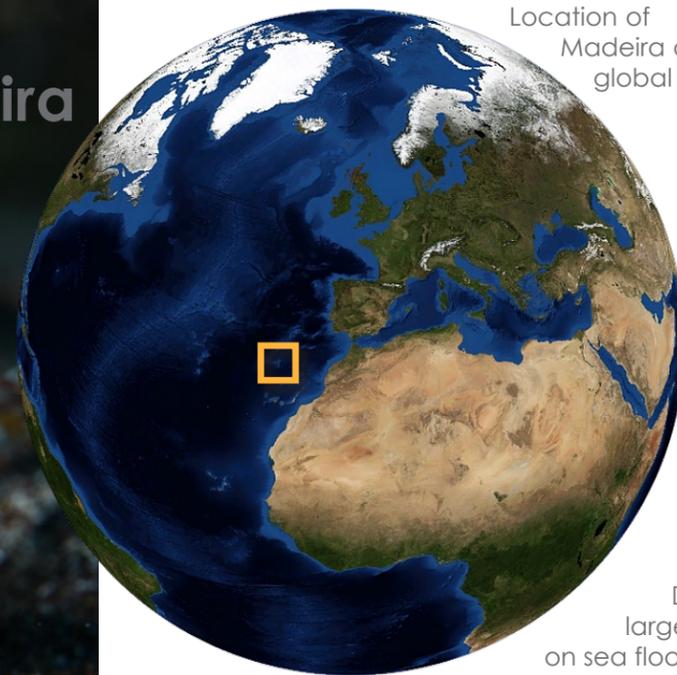
spots in Madeira island.

Only half of the reserve can be visited by divers, as the area most visited by monk seals is completely forbidden to navigation, bathing or diving.

The coastal area of Desertas is mostly characterized by steep cliffs only accessible through some rolled gravel beaches in some coastal spots. Its landscape is sculptured by constant sea and wind erosion, extending below the sea level where the rocky formations are true works of art from Mother Nature.

Diving in Desertas can mean a chance to witness large shoals of yellowmouth barracuda, white trevally, almaco jack and great lumberjack, and manta ray. In addition, it is also possible to encounter a sea wolf!

The Selvagens Islands, on the other hand, are located 163 miles south of Madeira and also have three major



Location of Madeira on global map

Lizardfish (left)
Diver with large stingray on sea floor (below)

HYPERBARIC CHAMBER: There is one hyperbaric chamber available for the whole archipelago located on the island of Madeira.

DESERTAS: 22 nautical miles from Funchal.

PORTO SANTO: 42 nautical miles from Funchal.

GETTING THERE: SATA and TAP are the Portuguese airlines with daily connections to Madeira. Lufthansa, Spanair, Transavia, Continental, Easy Jet and several European airlines have regular direct flights to Madeira and Porto Santo.

GETTING AROUND: Connections from Madeira to Porto Santo: By boat – Porto Santo Line www.portosantoline.pt By plane – SATA www.sata

Madeira Tourism
www.visitmadeira.pt

islands. However, diving activities are subject to permission issued by the Madeira Natural Park, and its distance from the other islands in the archipelago is enormous, which vastly limits the ecotourism activities in these islands.

All together, this group of islands has a bit to offer to every diver, from beautiful wrecks, cave dives, pristine waters, a healthy sea life, very reasonable weather year round and just a two- to three-hour flight from many European capitals.

Together with beautiful landscapes, hundreds of kilometers of walking trails, excellent bathing areas and the opportunity to see several species of whales and dolphins on a whale watching trip, Madeira is definitely a destination for keeping in touch with nature.

Nuno Sá is an underwater photographer and author based on the Azores. Visit: www.photonunosa.com



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