

COASTAL ITINERARIES

of the western Algarve

*Gentes
d'mar*
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INTRODUCTION

The sea itineraries of the Western Algarve offer first-hand information to this region's visitor or resident, aiming to increase curiosity and knowledge on the natural and human heritage of the sea of the Algarve.

It includes tips, curiosities and useful technical information concerning one of the most interesting parts of the Portuguese coast, not just because of its coastal outline and geological diversity, but also because of its marine biodiversity.

While the coastline and oceanographic dynamics provide some of the best surfing spots in the world, the luxurious underwater life (sponges, sea anemones, gorgonians, sea slugs and corals) is just at the reach of a hand in the crystal blue

waters. The west coast is really unique. Firstly, it is a confluence zone for different water masses from the Mediterranean, the North and the Tropical Atlantic. And secondly, it is also an up-welling area, where nutrients from deeper waters ascend to the surface near the coastline. Moreover, it holds two of the most important submarine canyons of the Portuguese coast: the Portimão and the São Vicente canyons. This privileged location is used as a gateway to seabirds and marine mammals like whales. Together with the resident dolphin population, they delight whoever has the opportunity to watch them.

Nevertheless, there is more than wildlife in these seas. There is also a contribution from European and Mediterranean naval history, with its ancient shipwrecks and one unique underwater museum. The latter includes four former battleships of the Portuguese Navy, now resting quietly on the bottom. They are the amusement of scuba divers from all over the world.

This volume is complemented by the Underwater Routes of the Western Algarve and the Fishing Villages of the Western Algarve. Together they form the "Gentes de Mar" Project, authored by Agência de Desenvolvimento do Barlavento (ADB), in partnership with the Marine Sciences Centre (CCMAR) of the University of Algarve. There are many reasons for a long and rewarding visit to the western coast of the Algarve but we hope to add a few more with these itineraries.





COASTLINE OF THE WESTERN ALGARVE

The coastline of the Western Algarve begins on the west coast, at the mouth of the Seixe stream (Odeceixe) and stretches until the mouth of the Quarteira stream (at Vilamoura). Within the Algarve context, it is mainly a rocky coastline, although it holds several geomorphological forms, such as the dunes at Praia dos Salgados, the carbonated cliffs at Praia¹ da Marinha or the high cliffs of Sagres.

Taking a tour from east to west, and starting on the coast of Albufeira, we can spot the conspicuous red cliffs of poorly consolidated sandstone and siltstone, forming a tracery of ravines and gullies. When arriving to Olhos d'Água, an old fishing village where freshwater springs percolate into the sea, we find the first low limestone formations, alternating with beaches and sandstone cliffs. Here, the marine rocky bottoms reach the beaches, creating another peculiar environment of our coast, exposed by low tide: the tidal pools (beaches of Olhos d'Água, Arrifes, and Manuel Lourenço). This rocky line is interrupted at the bay of Armação de Pera where the coastline profile diminishes and includes long dune formations

with typical vegetation and a wet zone, Lagoa² dos Salgados, a peculiar coastal ecosystem, very rich in terms of biodiversity.

At Senhora da Rocha, heading towards the fishing villages of Benagil and Carvoeiro and passing through the famous and worldwide known Praia da Marinha, we can find a high and graceful coastline formed by carbonated cliffs (dated from the Miocene Period, about 20 million years ago). Softened by time, these rocks were carved and shaped into small islands (sea stacks) forming a unique landscape of arches, sink holes, caves and coves, in constant change. Worn out by erosion, these cliffs are one of the Algarve's brand images. Additionally to its high landscape value, the cliffs are colonized by a Portuguese endemic plant community which includes juniper and kermes oak woods, dwarf palm trees, mastic trees and Aleppo pines, an ancient community dating back to the Quaternary Period. The diversity of geological forms, the inaccessibility of some places and its location in the land-sea interface make these cliffs of the Western Algarve a selected nesting place for birds, such as the common kestrel, the peregrine falcon, the rock dove, the European shag and different species of seagulls.

In Ferragudo and Portimão the landscape breaks as the fresh and salt water meet at the estuary of the largest river of the Algarve, the Arade. Here, in the large bay of Lagos, we can also find Ria³ de Alvor, one of the greatest natural values of the

Portuguese south coast. From the mouth of the Bensafrim River in Lagos and its extraordinary beaches, the outline of the coast requires a mandatory stop.

Heading to Sagres and passing Ponta da Piedade and its famous sea caves, we arrive at Praia da Luz where the imposing Rocha Negra stands out at Ponta das Ferrarias. This is a black eruptive volcanic massif, originated in the mountains of Monchique. This mountain, the highest one of the Algarve (highest point: Fóia, 902 m), can be seen from the sea across the western coastline, making it a conspicuous orientation point for local navigation.

Now we are in the Vicentina Coast, with its ravines and small sandy beaches with rolled pebbles. The Vicentina Coast usually presents an increasingly steeper profile as we approach Sagres. The Cretaceous marl formations are followed by Jurassic limestones with sharp vertical profile, however quite resistant to erosion and extending across the seafloor until a depth of 10 meters.

At Sagres, the high cliffs and promontories seem like the bow of a majestic ship heading into the Atlantic Ocean. Here, at the *Promotorium Sacrum*, there is a marked oceanic influence and the salty and strong north winds rule. Highly exposed to marine erosion, the cliffs of Sagres and the islets of Martinhal were carved into a remarkable number of sea caves, only accessible to divers. These caves have their own biodiversity, granting them a priority status of protection under the European Habitat Directive. The coast of Sagres holds the only Marine Protected Area of the Southern Algarve. This results from the remarkable marine biodiversity (sponges, sea anemones, gorgonians, corals, crustaceans, molluscs and fish). At the top of the cliffs, the rupicolous vegetation, well adapted to the extreme power of salty winds, stands out and dominates. Its unique biogeographical characteristics and its native plants have placed Sagres Peninsula in the European Network of Biogenetic Reserves.

As we turn around Cabo⁴ de São Vicente, the farthest point of southwest Europe, and we head north, we soon feel the peculiar sea and winds of the Algarve west coast. We leave behind the hard and clear limestones of São Vicente promontory and we enter in a territory of sand and schist. The cliffs are impressive, reaching 156 meters above sea level at Torre de Aspa (Vila do Bispo). They are formed of schist rock and dark greywackes, dating back to the Palaeozoic Period. São Vicente promontories are the symbol of the Natural Park of Southwest Alentejo and the Vicentina Coast, the longest area of protected Portuguese coast. As a result of the rise of sea level, the Vicentina Coast is sprinkled by small sea stacks, locally called palheirão or simply pedra (stone). They create particular marine environments, not only to marine organisms, but also to seabirds. These ecosystems are a full protected area (fishing and human presence are forbidden). Some examples of these stacks are Pedra do Gigante and Pedra das Gaivotas, in Sagres, Pedra da Agulha and Pedra da Carraça, in Arrifana, near Aljezur. Near the fishing village of Carrapateira we find an exception: limestone cliffs with fossil deposits from more distant times. The geodiversity of this place is remarkable. The highlights are the geomonuments of some beaches such as Telheiro, Ponta Ruiva and Murração. Another feature is the presence of streams (Bordeira, Aljezur and Seixe) contributing to shape the landscape. They combine their small estuaries with long beaches, greatly increasing the availability of habitats and life forms. At the end of this coast, near the fishing village of Arrifana, we can find another Marine Protected Area of the Algarve, known for its vast kelp forests (brown algae).

¹Beach Translator's Note

²Lagoon (T/N)

³Coastal lagoon (T/N)

⁴Cape (T/N)



■ Red cliffs near the beach of "Praia da Falésia" (Albufeira)



■ Sandy shore of Praia Grande near the small entry of Lagoa dos Salgados



■ Limestone stack near Praia da Marinha (Lagoa)



■ Limestone cliffs at Praia do Tonel (Sagres)



■ Schist cliffs at the Arrifana cove (Aljezur)



V ALGARVE



■ *Sea stack typical limestone cliffs landscape of the south coast and nesting habitat for coastal birds such as the peregrine falcon and the European shag.*





■ Great shearwater and Bulwer's petrel



MARINE FAUNA OBSERVATION

Birds

On land or at sea, the Western Algarve is one of the most interesting Portuguese areas for bird watching. On the one hand, land habitats mainly shelter Mediterranean birds (e.g., the spectacled warbler, *Sylvia conspicillata*, or the subalpine warbler, *Sylvia inornata iberiae*) and even Iberian birds (e.g., the Iberian magpie, *Cyanopica cooki*), with a high interest for European birdwatchers, who are regular visitors. On the other hand, the migratory period turns this area of the Western Algarve into something truly unique. This especially happens during the post-reproductive period, which roughly coincides with the end of summer and autumn.

During that period, the coastal region of the Western Algarve, especially Sagres, becomes a traditional crossing point for various kinds of birds, as they migrate from northern Europe along the Atlantic coast. Seabirds, waders (those connected with coastal, estuarine areas and freshwater bodies), passerines (small songbirds), nocturnal birds and soaring birds gather here before heading towards the wintering grounds in Africa.

For soaring birds (raptors and storks), unable to fly over the sea for long periods (they're mainly terrestrial migrators), Sagres represents a dead end. Due to inexperience, a large number of juveniles of several species instinctively take a southwestern turn in the course of their migration. As soon as they arrive in Sagres, they face the majestic Atlantic water mass, which prompts them to follow the Algarve coast until Gibraltar. For soaring birds of Western Europe, this is the main crossing point to Africa. However, sometimes they gather in impressive numbers on the Sagres Peninsula. For instance, in November, an impressive number of more

than 2000 griffon vultures (*Gyps fulvus*) were registered, together with some occasional black storks (*Ciconia nigra*), black-vultures (*Aegypius monachus*) and several species of eagles, including juveniles of the rare Iberian imperial eagle (*Aquila adalberti*), an endemic species of the Iberian Peninsula.

The passage of soaring birds occurs from mid-August (predominantly the black kite, *Milvus migrans*) and the Montagu's harrier, *Circus pygargus*) until late November. The biodiversity peak occurs between late September and early October, when the booted eagle, *Aquila pennata*, another famous local species, occurs in greater numbers. By that time, it is worth attending the Sagres Birdwatching Festival.

Regarding sea birds, at Cabo de São Vicente it is possible to see birds crossing in a north-south axis, along the migration routes. Some days, it is possible to watch flocks of a thousand Northern gannets, *Morus bassanus*, in one hour! The region also includes important feeding areas throughout the year. The underwater canyons of Portimão and Sagres provide an abundant supply of food for these birds, marine mammals, sharks and other marine fauna.

Of all the marine species regularly occurring there, the highlights are the Northern gannets, standing out in numbers, the shearwaters *Calonectris diomedea borealis*, the Balearic shearwater, *Puffinus mauretanicus* (in sharp decline but still easily spotted), and the European

shag, *Phalacrocorax aristotelis* (which nests on the coastal cliffs of the region). During sea trips, you can easily see some of the most interesting species according to European birdwatchers' opinion. These include migratory species of the southern hemisphere, like the great shearwater, *Puffinus gravis*, the Sooty shearwater, *Puffinus griseus* (which holds the record for the longest yearly distance travelled in migration: more than 64.000 km) and the Wilson's storm petrel, *Oceanites oceanicus*.

The Western Algarve includes a large area of the Natural Park of Southwestern Alentejo and the Vicentina Coast, a large classified area under Natura 2000 Network and several "Important Bird Areas" (IBA), classified by BirdLife. Some areas with ornithological interest in the Western Algarve coastline include Ponta da Piedade in Lagos, Pedra da Gaivota, in Ferragudo and the wetlands of Ria de Alvor, the Arade estuary and Lagoa dos Salgados, near Pera.

From nearly 400 bird species listed for Faro District, the majority have already been registered in this area.



■ Osprey, an iconic species



■ Subalpine warbler



■ *Common dolphin*

Marine mammals and big pelagic fish

As we leave the land and go out into the open ocean, we realise that the Western Algarve is a prime spot for whale and dolphin watching. Along its coastline, Albufeira, Portimão, Lagos and Sagres stand out as the major operational hubs for a large number of tourism companies. These companies provide sightseeing tours to tourists, allowing them to watch these animals in the wild. In order to do this, they use fast boats or catamarans with a large passenger capacity. A typical trip takes around 1:30–3 hours. In a good day, it is possible to spot several species of dolphins and even some whales. With sighting rates above 90%, the majority of these operational companies offer a quality product that amazes the visitor and contributes to their education and environmental awareness. In the Western Algarve there are three areas with an apparently larger concentration of marine mammals: the Portimão Canyon, Caneiros (at Ponta da Piedade) and the São Vicente Canyon

in Sagres.

The Portimão Canyon is an underwater rift valley located off shore from Praia da Rocha, about 12 miles south of the mouth of the Arade. This is an area with sharp sea floor slopes, where depth suddenly drops from 100 meters to 300 meters, going down to 2000 meters. This formation influences local currents contributing to a phenomenon known as upwelling, a process in which nutrient rich deep waters rise to the surface. This is the starting point of the food chain, allowing phytoplankton to develop. This kind of upwelling phenomenon occurs in a larger or lesser scale in the other two areas, supporting a complex and rich food chain. At the top of it, we can find species such as whales, dolphins, sharks, turtles, large pelagic fishes and numerous seabirds.

About 26 species of cetaceans may occur in Portuguese waters, but 5 of them are more frequently seen in the watching tours of the Western Algarve.

The most commonly spotted species in the Algarve

Common Dolphin

(*Delphinus delphis*)

This is the most regularly seen species in the Algarve. Very active, curious and exhibiting aerial behaviour, it offers unforgettable moments on watching tours. It is quite small, showing a tricolour pattern: white belly, yellow flanks and dark back. It is sighted in groups ranging from a few individuals to several hundreds. In the Algarve, the typically observed group has about 20 to 30 animals. Mothers with their off-springs and very young calves are often spotted, indicating that our waters are used as a birth place. The common dolphin mainly feeds on small fish, such as sardines and mackerel, and occasionally on squids and other invertebrates.

Bottlenose Dolphin

(*Tursiops truncatus*)

This is the most widely known dolphin species. They are large and powerful animals, grey coloured, with a short and strong snout. An adult can measure about 4 m and weigh 600 kg. They mainly feed on squids and fish, but they can chase other prey into shallow waters, such as estuaries and coastal lagoons, where they trap them. There are several anecdotes related with groups of bottlenose dolphins, pushing schools of breams, cuttlefishes and croakers into shallow waters. Hence, this is the reason for its common local name, roaz-corvineio — meaning ‘croaker eater’ (N/T). In the Western Algarve, it is common to find them in groups of 10 to 30 individuals. These family groups often include juvenile animals and off-springs as well as large adults. Particularly in the Portimão Canyon area, their connection with the local bottom trawlers is widely known. It is very common to find these groups of dolphins following the trawlers and opportunistically feeding on their catch. In Cadiz region, it has even been recorded on film their intentional movement in and out of the trawling bag, for feeding, during the fishing operation.

Grey Dolphin or Risso's Dolphin

(*Grampus griseus*)

This is a large dolphin, similar in size to the bottlenose dolphin but without a snout. They have grey colour at birth, losing it along their life. Adults are white and show their body fully covered with scars. These scars are not only due to socialization behaviour, but also to feeding. This species can dive to about 500 meters deep, looking for squids and other cephalopods as its main food source. They are more frequently sighted in areas with higher bathymetric slopes and greater depths, such as the submarine canyons of Portimão and São Vicente. They remain underwater for several minutes, sometimes surfacing hundreds of meters away from their dive point.

Common Porpoise or Harbour Porpoise

(*Phocoena phocoena*)

The common porpoise belongs to a different family of dolphins. They have no snout and have several distinct anatomic and structural traits. They are coastal animals, small and very shy. Their observation is very difficult because they usually do not approach the boats and show an erratic movement, constantly changing direction. They feed close to the bottom, looking for small fish, crustaceans and cephalopods. In the Algarve, they are often spotted along



■ Bottlenose dolphin

the coast, at the beginning, or at the end of the tours, scattered in small groups. Most of the time, common porpoise watching is merely an observation of the small dorsal fin which occasionally surfaces.

Minke Whale

(Balaenoptera acutorostrata)

Although this is the smallest of all baleen whales, it can reach 10 meters in length and weighs 10 tons. Exhibiting a dark blue colour, sometimes it has a white spot on the pectoral fin, a distinctive feature of this species. They usually are very curious and may approach the boats and stay close for several minutes. It is a fantastic sighting, always impressive by its graciousness; it is even possible to watch these animals jumping out of the water. They can be often found in groups of two, but they have already been spotted in groups of five to six individuals. Sometimes, juvenile animals can be seen together with their mothers. They feed mainly on small fish and planktonic crustaceans.

Other species of cetaceans observed in the Western Algarve

Besides these most frequently observed species, blessed tourists can still be presented with an unusual meeting with other less common animals occasionally appearing in these waters. On a lucky day, you may spot: the humpback whale (*Megaptera novaeangliae*) in its annual



■ **Minke whale**

north-south migration; the killer whale (*Orcinus orca*) chasing after blue fin tuna schools; the fin whale (*Balaenoptera physalus*) and the Sei-whale (*Balaenoptera borealis*), migrating from and into feeding grounds in the north; pilot-whales (*Globicephala* sp.) or the ever-frantic striped-dolphins (*Stenella coeruleoalba*).

There are several species of large pelagic fish in the Algarve: from sharks (the blue shark, the mako, the hammerhead or the thresher shark) to other fishes (the dolphin-fish, the swordfish, marlins and the eagerly-desired tuna). In a greater or lesser extent, all these species perform remarkable migrations for feeding and reproduction: they cross the Atlantic and they enter and exit the Mediterranean. We highlight two of them, due to their importance to nature tourism: the blue shark and the blue-fin tuna.

Blue Shark

(Prionace glauca)

This is an oceanic species which sometimes can be found a few miles away from the coast. As a resident of temperate and tropical waters from all over the world, it is probably the most abundant pelagic shark species in the Atlantic and Portuguese waters. It is possible to distinguish it by its blue colour and its elongated and slender body, reaching a maximum length of four meters. The blue shark usually feeds on cephalopods (squids) and fish. However, as an opportunist species, it can feed on many other species, if it has



■ **Group of Orcas in migration**



■ *Blue shark*

a chance. Due to its meat or its fins, this species undoubtedly contributes to the majority of shark catches by commercial long liners (a longline fishing vessel) that target to other large pelagic fish (such as tuna or swordfish). Currently, it is somewhat difficult to evaluate the present status of this resource because of its wide distribution and complex migratory patterns. Nevertheless, there is a general opinion that the more recent fishing effort on the stock cannot be maintained for much longer without causing considerable damage in the species abundance.

Still, the value of this species as a living resource has considerably increased in more recent years. This is due either to recreational fishing (catch and release) or to the development of shark watching and scuba diving. Although the former activity has been taking place in the Algarve for many years, with companies operating in all marinas and harbours of the Western Algarve, shark diving doesn't have a significant expression, notwithstanding its strong development in other places like the Azores. In the Western Algarve, several fishing

companies also offer recreational fishing as a touristic product. In addition, at least one shark diving project with a scientific background was developed in the Algarve, namely, in Portimão: the "We like Sharks" project. It aims not only to raise the community awareness for the conservation of these species, but also to test the viability of this activity as an eco-tourism product for the region. The encounters with small and medium-sized blue sharks were frequent during the experimental trips, showing a great potential for development of this kind of activity in the area. Bearing in mind the motto "A shark is worth more alive than dead", several institutions and organizations have undertaken efforts towards the conservation of this resource on a local and national level.

It is not clear if this species can be considered dangerous. Despite some reported attacks, these animals are usually calm and curious, with a highly predictable behaviour and barely aggressive. Nevertheless, in cases of feeding frenzy, or a shipwreck with wounded people in the water, they can change their behaviour

and become more aggressive and dangerous to humans. The blue shark was accused of being responsible for the majority of shark attacks during the shipwrecks of World War II, due to its abundance and willingness to attack when excited enough.

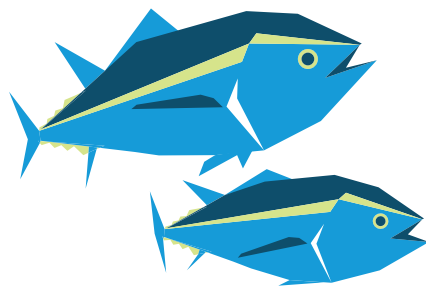
Bluefin Tuna

(Thunnus thynnus)

This is the biggest and most valuable species of tuna in the world. It may reach more than 4 m in length and weigh over 600 kg. This is a pelagic species, with a gregarious behaviour. It can usually be found in shallow waters, swimming to greater depths during the day and approaching the surface at night. The Bluefin tuna is distributed throughout the North Atlantic and the Mediterranean. They carry out seasonal migrations, which are known for centuries and were even exploited by the Romans in the Mediterranean, two thousand years ago.

It is estimated that the longevity of the Bluefin tuna exceeds 15 years, reaching sexual maturity around 4–5 years of age. They are carnivorous, feeding on small fish, like sardines, mackerels and herrings. They can be seen in the Algarve during the spawning migration from the Atlantic to the Mediterranean, between May and June, and afterwards, during their return, between August and September, to spend the winter in temperate waters. An evidence of these ancient flows has been the presence of several fishing traps, settled along the coast. The well-known village of Armação de Pera takes its name from the presence of a local Bluefin tuna fishing trap. Other places like Belixe, Almadena, Burgau, Torralta, Ponta da Galé, Olhos d'Água, Quarteira, Cabo de Santa Maria, Fuzeta and Tavira also had these structures, a testimony of the life and habits of the people of the Algarve. Nowadays some of these fishing gears are still working. They account for a very interesting number of catches of this highly valued species, though increasingly controlled and regulated. Over the past 4–5 years there has been a gradual recovery of the

stock due to strict supervisory measures, with very low fishing quotas. Considering the risk of commercial extinction of this species, which seemed almost certain over the past decade, this could mean that perhaps the worst part is over for the Bluefin. Watching a school of Bluefin tuna is a unique and unforgettable experience, either for the gracefulness and vigour of its movements, or for the impressive size of the animals. Currently, it is possible for tourists to have this experience in one of the existing fishing traps in our coast, while diving alongside with these sea giants.





■ School of seabreams in one of the Ocean Revival's wrecks



■ Canary bream



SCUBA DIVING

Proceeding into open water and diving into it while exploring its hidden treasures, we find a blue world in the Western Algarve, full of life, and keeping many memories of the past. Regarding its natural heritage, we can see that the Western Algarve consists of a variety of rocky bottoms creating a diversity of habitats and a unique biological community in the European context. From the coastal sea-grass meadows (at Santa Eulália, Arrifes and Marinha), passing by the area with the highest natural richness of the Algarve coast, the bay of Armação de Pera, the rocky formations and artificial reefs of Alvor, the shoals of Porto de Mós, the sea caves in Sagres and ending in the kelp forests of Arrifana, the Western Algarve has plenty to offer.

Regarding underwater landscape and marine life, there are many diving spots in the Algarve

coast. The highlights are in Sagres, due to its crystal clear waters, caves, tunnels and its mixed biodiversity originated in northern, tropical and Mediterranean environments.

Underwater photography in Sagres goes beyond the typical macro photography made elsewhere in the Algarve. Schools of sea breams, conger eels, mullets, parrotfish or mackerels easily catch your attention and fight for their place on the wall of fame. This is a place where gorgonian gardens can show five different species in all the colours of the rainbow. Notwithstanding, the apparently fragile and no less colourful jewel anemone dominates the bottom of the highest promontories, challenging the ocean swell.

But, if macro photography is your call, you have an array of nearly 40 species of nudibranchs (sea slugs). They show off bold and bright colours, betraying a toxic side which they save to potential predators.

This is also the only place in the entire European Atlantic coast where you can find some tropical fish, such as: red-banded seabream (*Pagrus auriga*), the Canary dentex (*Dentex canariensis*),



■ **Sea slug**

the lemon-fish (*Parapristipoma octolineatum*) and the damselfish (*Chromis chromis*).

Alongside with this marine biodiversity richness, the Western Algarve has some of the jewels of underwater archaeology in Portugal. There were many shipwrecks in the Western Algarve coast over the centuries. Nonetheless, the remains of L'Ocean, Torvore (Vapor das 19), Wilhelm Krag and the Burgau barge are the ones which deserve more attention and receive more visitors.

L'Ocean measured about 60 meters in length and had 80 cannons. It was the flagship of the French fleet that engaged in combat with the English fleet, during the Battle of Lagos, in 1759. By the end of the battle and in disadvantage, the ship sought for the protection of the Portuguese batteries at the fortresses of Zavial and S. Luis de Almadena. Then, it stranded in order to save the crew of 800 men. Its remains were the first underwater archaeological site to be equipped with a guided itinerary for scuba divers, providing information on-site about the wrecks (6 to 9 m deep).

In 1917, during World War I, the steamships

Torvore and Wilhelm Krag were both sunk on the same day, along with two cargo ships, by the German submarine U35, using explosives. This happened off Praia do Barranco (28 to 32 m deep) and Praia da Luz (28 to 34 m deep), respectively. Diving on these deep wrecks requires additional planning. Even so, the reward is easily guaranteed given the richness of forms, the sceneries and the schools of swallowtail sea perch, bibs, damselfish, zebra seabreams, burrowing conger and moray eels.

The Burgau barge is a shallow dive (6 to 10 m deep), suitable for beginners or even for those who prefer to access it by swimming from the beach. Little is known about its origins. Probably, it belonged to the ancient quarry at Ponta de Almadena. It sunk in front of Burgau during a storm, in the 80's. The wreck has about 20 meters long and holds a luxuriant fauna of fish and invertebrates. It is an excellent spot for underwater photography.

OCEAN REVIVAL

The Ocean Revival Park was recently created to establish an underwater museum and, simultaneously, an artificial reef. Aiming to promote underwater tourism, this innovative project includes four sunken warships of the Portuguese Navy, all in one place. The Park is located offshore Portimão, 2 miles off Prainha beach and eastwards of Alvor's artificial reefs. Their bottom depth ranges from 26 to 32 meters deep. The four sunken ships are representatives of the Portuguese Navy. They are: the oceanic patrol, *Zambezi* (44x8m); the hydrographic ship *Almeida Carvalho* (64x12m); the corvette *Oliveira e Carmo* (85x12m); and the frigate

Hermenegildo Capelo (102x12m).



■ Octopus inside the cannon of a shipwreck, off the coast of Portimão (Ocean Revival)





SURF AND BODYBOARDING

Back to the land-sea interface and if you're looking for some adrenaline rush, wave sports are the answer. Within Europe, the Western Algarve is a prime site for sports, such as surf and bodyboarding. Its geographical characteristics, its exposure to North Atlantic winds and waves and its temperate climate combine to create perfect conditions nearly all year round and call practitioners from all over the world.

Waves coming from a hundred kilometres away from the surf zone (North Atlantic storms) and a weak to moderate offshore wind (blowing from land to the ocean) create the ideal surfing conditions. This combination occurs quite often in the Western Algarve, namely between autumn and spring, as SW-NW waves arrive together with east-north winds. In summer,

southeast waves (levante) together with north winds create the ideal conditions for beginners. In short, summer presents favourable and appealing conditions, ideal for beginners, and winter is mild, offering a good number of days with conditions suited to a higher practice level. Therefore, in recent years, surf schools and surf camps have developed, receiving thousands of wave tourists, particularly in the area between Lagos and Aljezur. Sagres has turned into the unmatched wave capital of the Western Algarve, due to its unique location in the transition from the south to the west coast. A few kilometres away, beaches like Zavial, Tonel, Beliche, Ponta Ruiva, Arrifana, Bordeira or Amado show outstanding conditions and world class waves that thrill Portuguese and foreign athletes.

In addition to these popular places, this wild coast holds many beaches and coves, surprising the more adventurous surfer seeking for high quality waves and uncrowded places, the 'secret spots' in surf slang.



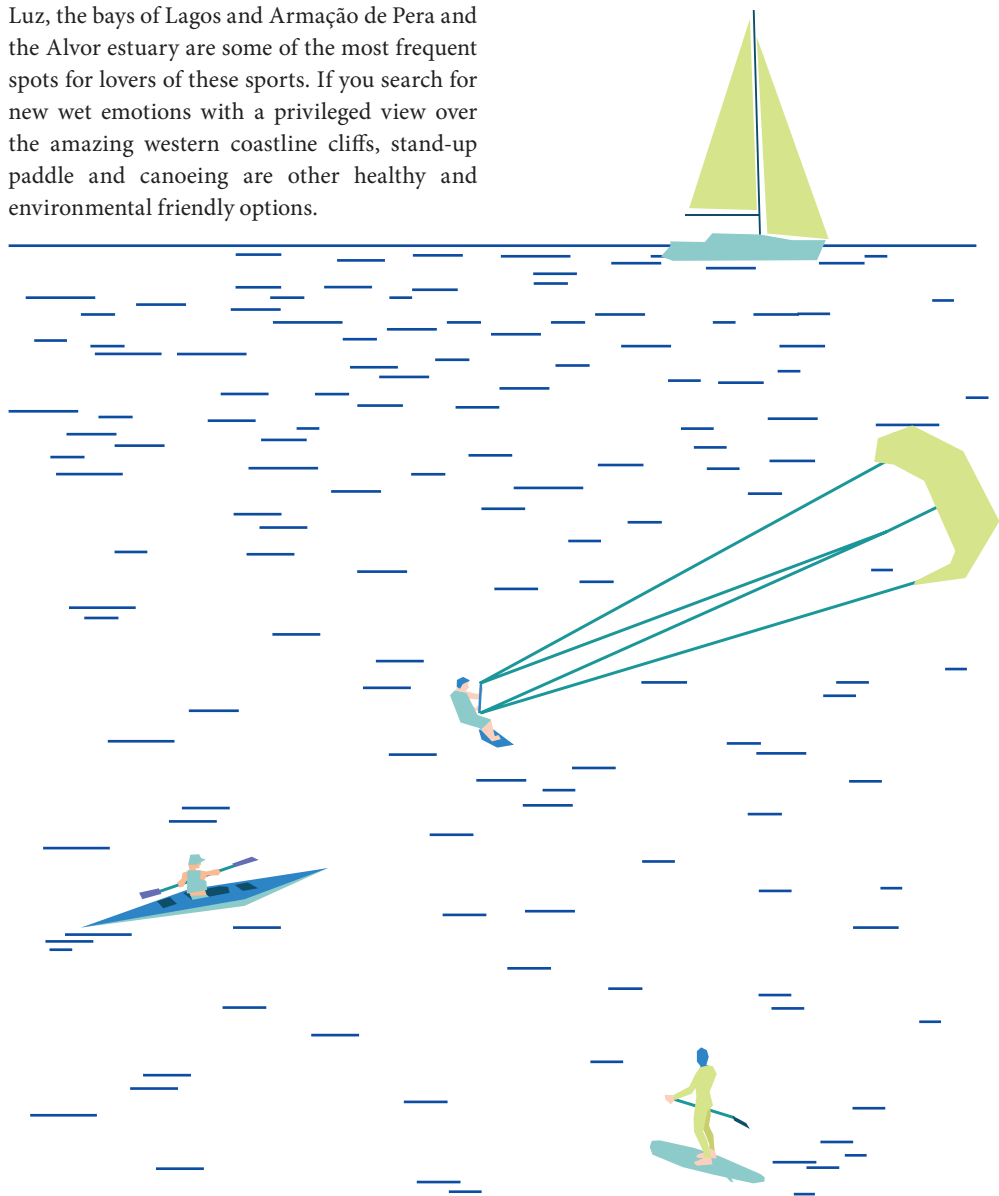
SHORT GUIDE FOR THE MOST FAMOUS BEACHES

BEACH	CHARACTERISTICS	LEVEL	IDEAL CONDITIONS
ZAVIAL	<i>left and right very hollow and fast</i>	<i>intermediate and advanced</i>	<i>waves from SW to NW (1m to 3.5m); moderate wind from N</i>
TONEL	<i>left and right very hollow and fast</i>	<i>intermediate and advanced</i>	<i>waves from SW to NW (1m to 2.5m); moderate wind from E</i>
BELICHE	<i>left and right very hollow and fast</i>	<i>intermediate and advanced</i>	<i>waves from SW to NW (1.5m to 3.5m); moderate wind from N</i>
PONTA RUIVA	<i>long left and manoeuvrable wave</i>	<i>beginner and advanced</i>	<i>waves from SW to NW (0.5m to 3m); moderate wind from E; possible option when waves are too high in most of the other western coast beaches</i>
AMADO	<i>left and right</i>	<i>beginner to advanced</i>	<i>waves from W to NW (0.5m to 2m); moderate wind from E</i>
BORDEIRA	<i>long left and manoeuvrable wave</i>	<i>beginner to advanced</i>	<i>waves from W to NW (1m to 2.5m); moderate wind from SE</i>
ARRIFANA	<i>long left and right manoeuvrable wave</i>	<i>beginner to advanced</i>	<i>waves from SW to NW (1m to 4m); moderate wind from E; possible option when waves are too high in most of other western coast beaches</i>



Other Nautical Activities

One of the biggest advantages of the Western Algarve is the excellent conditions for the practice of wind powered nautical activities. This is the case for sailing, windsurfing or others like kitesurfing, which take advantage of a wind-wave combination. Beaches like Martinhal and Luz, the bays of Lagos and Armação de Pera and the Alvor estuary are some of the most frequent spots for lovers of these sports. If you search for new wet emotions with a privileged view over the amazing western coastline cliffs, stand-up paddle and canoeing are other healthy and environmental friendly options.





READING SUGGESTIONS

www.apambiente.pt/

www.visitalgarve.pt

www.turismoalgarve.pt

www.avesdeportugal.info

www.birdwatchingsagres.com

www.icnf.pt/portal/agir/sab-mais/mamif#mam

www.icnf.pt/portal/turnatur/visit-ap/pn/pnsacv

www.facebook.com/welikesharks/

www.fishbase.org

www.oceanrevival.org/

www.hidrografico.pt/previsao-surf-algarve-barlavento.php

www.ipma.pt/pt/maritima/costeira/ad-barlavento.pt/

www.ccmар.ualg.pt/

www.ccmар.ualg.pt/

(websites last accessed in December 2015)



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