

WALKING TRAILS GUIDE TRAILS OF THE AZORES



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Editor's Note

It is with great pleasure that the Azores Tourism releases a new edition of the Azores Interpretive Walking Trails Guide, an accomplishment that is doubly satisfying because, apart from demonstrating the enormous success of the previous ones, it also increases the variety of offers that results from the fact that is contains all the trails in the Region's official network, including the Great Routes, in a global extension of approximately 800 kilometres. This book is aimed at all nature lovers who like to walk and enjoy the things it has to offer. If you are one of those people, this guide will be an indispensable tool to guide you through the routes and to help you choose the walking trails you wish to cover.

This new edition features all the 79 homologated walking trails in the Autonomous Region of the Azores. And each one of them will offer the hikers with something different: a landscape, a scent, a sound or an emotion that will stay in his or her memory for many years. Those who have already covered these trails will understand what I mean, and those who are preparing themselves to walk these paths will experience something they will want to repeat. It is important to add that this project was only made possible because the "Os Montanheiros" Association accepted once again the challenge of perpetuating this partnership and contributing to the advertisement of the best the Azores has to offer. Finally, I would like to convey my hope that this edition equals or surpasses the success of the previous ones, and that those who carry this guide under the arm have wonderful walks in their company. It will serve as their interpreters in the places they will see while covering the trails and will translate into words the feelings that nature will arouse in them.



Walking Trails Guide | Azores Trails

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Ethics and Security

- > Carefully check the course map and additional instructions to see if a given trail is adequate for your physical condition.
- > Check the weather forecast so you can better assess the conditions of a given trail.
- > Inform someone of where you are going and what time you plan to return. Ensure that you have adequate clothing taking into account the weather and other conditions.
- > On some trails, the mobile phone network may be intermittent or non-existent for most of the route. Please take this information into account if you plan to make any calls.
- > If you leave your car at the starting point of the trail, make sure you lock all doors and windows.
- > Respect the trail marks. Stay within the signaled track.
- > Do not collect bio/geological samples, and do not pick fruit from orchards. Do not disturb the cattle.
- > When planning your hiking day, always check the official website for the Azores Trails, for updates and alerts (www. trails.visitazores.com)
- > Do not leave any waste on the trail. Bring back with you all the trash and dispose of it in an appropriate container away from the trail.
- > Respect the private properties. Always close any gates you may use.
- > Alert anyone that you come cross to the hazards that you may have found.

Trails Signs Great Routes Signs Right way Wrong way Turn right Turn left Turn right Turn left



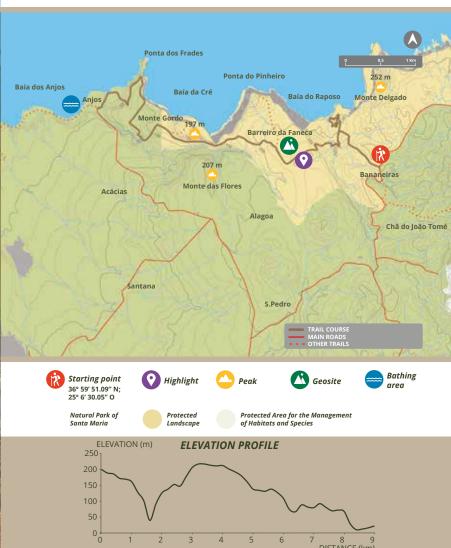
TRAILS OF THE AZORES



PR1 SMA

Costa Norte

Difficulty: Medium Extension: 9 km Time Average: 4:00h Category: Linear



DISTANCE (km)

PR1 SMA Costa Norte

The trail begins in the village of São Pedro, more specifically at Bananeiras and ends on the north coast of the island, at Anjos, where the first settlers of the island arrived on the 15th century. When you get to the junction of the rural road of Feteiras do Baixo, next to a bus stop, you will find two information panels, because the stage 4 of Santa Maria Great Route also begins at this location.



Begin by descending 400 metres of a rural path, amid some pastures. Take a pathway next to a house, follow the pathway until you reach the coast, surrounded by some species of endemic flora such as *Picconia azorica* and *Erica azorica* and the native *Morella faya*. Ahead of you, Baía do Raposo and, as indicated on the information panel, you can make a detour of 1,2 km that goes downhill through a very popular shortcut to the bay. In this protected landscape zone of the Natural Park of the

PR1 SMA Costa Norte

island, you shall have the opportunity to visit two old watermills, the stream that feeds the watermills and the ruins of a local winery.

In addition, take a chance to contemplate the bay, classified as a geosite, where you can observe lava flows with columnar disjunctions in the steep cliffs with heights reaching 200 metres. Completing the scenic beauty of this landscape, we highlight the waterfall of Ribeiro do Engenho, which falls here. Go up the hillside at the opposite side, among some species of natural flora, such as *Picconia azorica* and *Pericallis malvifolia* as well as some introduced species, such as *Arundo donax* and *Agave americana*. As to the avifauna, you will have the opportunity to observe, for example, *Buteo buteo rothschildi, Erithacus rubecula* and the *Regulus regulus sanctae mariae*.

Return to the information panels and walk in the direction of Anjos (6,7 km), across a wood of *Pittosporum undulatum* and *Picconia azorica*, cross two streams and, soon after, walk up slightly until a clearing reveals an extensive area of clay, one of the most iconic geological landscapes, unique on the island and the Azores: Barreiro da Faneca.

Follow the signposts and walk around the left side of this impressive landscape. The surrounding wood comprises various endemic species such as *Picconia azorica*, *Erica azorica*, *Hypericum foliosum* and *Laurus azorica*. When you reach the asphalt road, walk some metres and turn right into a path that descends along the valley of Ribeira do Lemos and where you can observe, in the distance, a flatter zone common on the western side of the island. A bit further ahead, next to a house in ruins, you may observe Baía da Cré, part of the *Protected Landscape Area* of Barreiro da Faneca, where one finds well



BARREIRO DA FANECA

Also known as "The Red Desert of the Azores" comprises a zone of arid and clayey land, reddish in colour, resulting in a landscape with geological and morphological attributes that are unique in the Azores and are of geological interest at the national and international levels. This geological formation originated with the alteration of the pyroclasts that resulted from the most recent phase of volcanism on the island, known as "Formação das Feteiras", which happened 4 million years ago under the influence of humid and hot temperatures. The terrain at Barreiro is undulated, with very smooth declivities and a reduced drainage capacity, given that clayey soils make the draining process difficult. Due to the weak drainage network, aeolian erosion predominates, the principal reason for the existence of "dunes".

PR1 SMA Costa Norte

preserved sedimentary formations with fossil contents. This bay is a nesting area for some seabirds, such as *Calonectris diomedea borealis*, *Sterna hirundo* and *Sterna dougallii*.

Continue walking and, soon after going around Monte Gordo, you will have the opportunity to make a detour of 300 metres, up to the top of this hill Monte, where you shall find an old whale watching tower that will offer the opportunity to observe Baía da Cré from another angle. Next, take the shortcut ahead and descend toward Ribeira do Lemos (stream), remaining as close as possible to the stone wall on your right. When you get to the bed of the stream, cross it carefully and continue walking right. Cross the stream again and go up the hillside, where you can observe the *Opuntia ficus-indica* and the *Agave americana*. Follow the signposts on your left pointing to a shortcut that will lead you into a pasture. Walk in the direction of a stone wall on the opposite side of the pasture and walk right. On this phase of the trail, you will have to cross some pastures while heading toward Ponta dos Frades. Walk slowly since the ground has been stepped on by cattle and is therefore irregular.

When you get to Ponta dos Frades, you may observe some of the bays that are a part of the Protected Landscape Area of the northern coast of the island. At the forefront, the Ponta do Pinheiro and Baía da Cré. In the backdrop, you may observe Ponta do Pesqueiro Alto, wherein one finds Baía do Raposo, your point of departure. In the background, you may also observe the islet called Ilhéu das Lagoinhas. Descend next to the wall and turn left, with Anjos as your landscape. Head in the direction of the valley ahead of you. Cross the old stream and go down the somewhat slippery shortcut that was carved on the hillside, until you reach a pasture. In a short time, you reach the coast, where you should turn left. You get to the river mouth of Ribeira do Lemos, in a zone where you can observe various vineyard corrals. Go up the shortcut that flanks the stream, cross the bridge and walk to the asphalt road, where this trail ends. If you wish, you can continue for a few more metres until you find a bathing-beach area and an adjacent restaurant.

In the square, you can find a statue of Columbus that commemorates the fifth centenary of his passage by the island of Santa Maria where it is said he ordered a mass to be celebrated at Ermida de Nossa Senhora dos Anjos, located straight ahead. In 1493, when he was returning from his voyage to the New World, his small fleet was tormented by a storm so great that one of his vessels, Pinta, simply vanished. Faced with the possibility of a shipwreck, Columbus and his crew promised that if Pinta had been spared they would celebrate a Thanksgiving mass in the first church consecrated to Our Lady that they would find. On the 17th of February of that same year, they landed on Santa Maria and were informed by the locals of the existence of Ermida da Nossa Senhora (Our Lady's Chapel) on the island, thus enabling them to fulfil their promise.

TRAILS OF THE AZORES



PRC2 SMA

Pico Alto

500 400

300 1

Difficulty: Médio Extension: 6,2 km Time Average: 2:00h Category: Circular



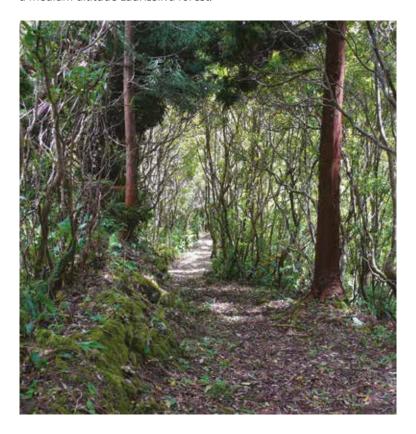
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4

DISTANCE (km)

PRC2 SMA Pico Alto

This trail is situated in the forest of Pico Alto, in the central zone of the island, where several volcanic peaks coalesce into a mountain formation, forming a barrier that divides the pastures of the western and eastern sides of the island. Since it is the principal elevation on the island of Santa Maria, it captures humid winds, fostering the formation of orographic clouds and occult precipitation. Such conditions favour the formation of a medium-altitude Laurissilva forest.



As you arrive at Pico Alto's car park, you will find the information panel of this small trail. Before initiating the trail, go up the staircase indicated by the information plaque, leading you to the geodesic vertex that marks the highest point of this volcanic peak, at 587 metres of altitude.

Back to the car park. There are two shortcuts, one of which is used for the practice of BTT, as you can check on the information panel. Take the shortcut on your right, where the information panels concerning Pico Alto and Bananeiras (5 km) are located. You rapidly realise that, besides cryptomeria trees, there is a diversity of flora species that thrive on the Laurissilva medi-

PRC2 SMA Pico Alto

um-altitude forest, such as Laurus azorica, Ilex perado ssp. azorica, Vaccinium cylindraceum, Picconia azorica and Viburnum treleasei. For this reason, this zone of Pico Alto is classified as a Protected Area for the Management of Habitats and Species. The presence of different leafy lichens in the trunks of trees reveals the high levels of humidity of this location throughout the year. The avifauna also makes its presence felt and on this trail, it is possible to identify such species as Motacilla cinerea patriciae, Erithacus rubecula, Fringilla coelebs moreletti and Regulus regulus sanctae mariae.

Continue walking on the well-defined shortcut amid the vegetation. Occasionally, there are clearings that enable us to see, on the right, the village of Santa Bárbara and, on the left, the village of São Pedro. A bit further ahead you will have the chance to make a small detour to the belvedere of Caldeira. The Belvedere is the site of a geodesic marker and it offers an ample view of a great part of the island. From left to right, our gaze reaches the elevation of Facho, Vila do Porto, the principal residential area in the island; the flatter zone of the airport; the small village of Anjos; the Barreiro da Faneca; Lagoinhas, the locality of Norte and the village of Santa Bárbara. When visibility is good you can see the neighbouring island of São Miguel on the horizon.

Back on the trail. You will now begin a steeper descent, going around this elevation of the Caldeira, amid a wood of *Pittosporum undulatum*. You will cross the stream and soon you will get to an abandoned house known as "Casa do Guarda." You can read on the information panels that you are 3 km away from the end of this trail. Turn left, as indicated, and continue on the forested shortcut, amongst *Cryptomeria japonica* and *Pittosporum undulatum*, heading in the direction of Alto da Nascente, occasionally crossing some streams.

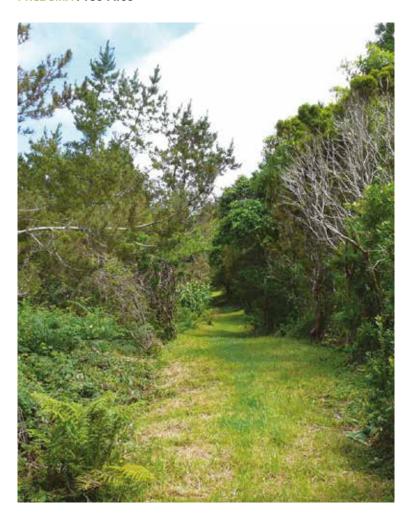
When you get to Alto da Nascente, at the base of Pico Alto, turn left and walk up along the stream. Cross it later and walk up for around 1 km amid the wood, through a road that is used by the workers that forested this area.



SANTA MARIA'S LANDSCAPE

From this belvedere, you can observe a great part of the island and confirm the existence of different land-scapes. The western half is low and almost flat, dry and scantily vegetated. The eastern half is humid, wooded, steeper and endowed with fertile land that is exploited by traditional agricultural practices. In order to grasp the geographical disparity of these two zones, we should note that the annual precipitation on the western zone varies between 700mm and 1000mm, whilst the average precipitation on the eastern zone varies between 1400mm and 1800mm.

PRC2 SMA Pico Alto



When you get to Caminho do Pico Alto, turn left. You will notice, at the edge of the road, a landmark that honours the victims of the biggest air crash in Portuguese territory. The doomed flight of Independent Air was connecting Italy to the Dominican Republic. It crashed into this zone of Pico Alto when attempting to land at the local airport for refuelling.

Continue walking straight ahead and, next to the car park, you may observe the last point of interest in this trail - the *Casamatas* (casemates) do Pico Alto. This set of military structures were built in the years after World War II, in the context of the Cold War, with the purpose of serving as a radar station. Presently the buildings are not used and are the home of a radio station.

TRAILS OF THE AZORES



PRC3 SMA

Entre a Serra e o Mar

Difficulty: Médio Extension: 9,5 km Time Average: 2:30h Category: Circular



PRC3 SMA Entre a Serra e o Mar

This is a circular trail that goes through several points of interest in the village of Santa Bárbara, in the northeast zone of the island. The steep topography of the terrain contributed to the spatial distribution of the houses, most of which are typical "Santa Maria houses", making it one of the most picturesque places on the island.



The settlement of the village of Santa Bárbara occurred on the 16th century. It was the third village to be created on the island. Throughout the last century, there was a considerable drop in the number of its inhabitants. The current population is around 400 persons.

Go to the centre of the village of Santa Bárbara, where you shall find the trail's information panel in the vicinity of the parish church. This religious temple dates back to the 18th century and was built in masonry, the rock being plastered and whitened, with ornamental elements made sculpted in rock.

The counter-curved pediment with curls, the decorative element that binds the principal door to the upper window, the window's head made out of stone and the bell tower topped by pinnacles in the four corners are some

PRC3 SMA Entre a Serra e o Mar

of the principal characteristics of this church. In the churchyard, there is a small building with a door in the principal facade and a window on each of its lateral sides. Its roof consists of roof tiles. These are the so-called "treaters." The objective of these constructions was/is to pay homage to the cult of the Holy Spirit. Over the door, you can see a memorial panel wherein is inscribed the probable date of the construction of this building (1900).

With your back turned to the church, walk to the right of the regional road for approximately 300 metres. Turn left into a cemented path with a steep inclination that leads toward Atoleiros, where you will find two old windmills, on the elevated terrain on your right. Built on the 20th-century, the windmills were constructed on an elevated zone so as to benefit from high-intensity winds that would boost efficiency. Architecturally speaking, these windmills present the typical structure of the various windmills on the island: a conical-trunk made out of plastered stone, two opposing doors on the same axis and a window on the perpendicular (terrestrial) axis, two to three windows on the floor above and a gyrating dome. After appreciating this set of old windmills, walk left on the regional road mid some houses and, 250 metres ahead, turn right into a dirt road shortcut, amid some endemic species such as *Picconia azorica*, *Laurus azorica*, *Erica azorica* and *Myrsine africana*. Next, a clearing opens the view to a very significant scenic geo-site - Poço da Pedreira.

Go to the opposite side of Poço da Pedreira until you reach the regional road. You will find some signposts. Remain on the asphalted secondary road that leads to Terra Velha. At the next fork, turn left into Caminho Rural dos Barreiros and enjoy the rural landscape. Cross the regional road with caution and continue walking on an old path that will lead you to Barreiro, more specifically Eira Alta. While on the asphalted road



POÇO DA PEDREIRA

It is an old mine carved into a volcanic cone. It is constituted by reddish basaltic pyroclastic rocks, well consolidated and altered, given the antiquity of the volcanic cone (3 to 4 million years). The relative pliancy of the materials enabled the geometrical cutting of large rock blocks, hence its current appearance. The extracted material was very important in the construction of the typical houses of Santa Maria island. The extraction of rocks stopped in the first half of the 20th-century, after the arrival of cement and iron to the island. A pond was formed at the front of the mine, where there was a depression. It attracts diverse species of avifauna, such as Ardea cinerea, Erithacus rubecula, Sylvia atricapila atlantis, Motacilla cinerea patriciae and Regulus regulus sanctae-mariae, a sub-species endemic to the island.

PRC3 SMA Entre a Serra e o Mar

you will have a chance to observe a typical house of Santa Maria. In the next 2 km of the trail, you will also have the opportunity to observe the surrounding valley where one can find various typical houses dispersed on the landscape, with Pico Alto in the background.

A bit further ahead, a plaque pointing to the Belvedere. If you so wish, walk for 600 metres until you reach the belvedere of Espigão, with its fabulous view over the bay of São Lourenço. After making the detour, continue walking on the asphalt and, around 1 km ahead, turn left at the plaque that indicates the Ermida de Nossa Senhora de Lourdes. When you get to the chapel, do notice the following interesting detail: the principal facade is turned north, something rare in the Azores. The chapel dates back to the 19th century and was erected in honour of Our Lady of Lourdes, after the apparitions at Lourdes (France) at the beginning of the same century.

Go down the chapel's staircase, cross the portal and take the shortcut that will lead you to the valley of Lagos. Whilst descending, which alternates between gobbled stone and dirt road, you may see in the background the islet called Ilhéu das Lagoinhas. When you get to the stream bed of Ribeira do Amaro, cross a small wooden bridge into the asphalt. You are now in Lagos, where some houses are dispersed and the land in the adjoining hillsides is cultivated. Go straight ahead and turn right on the cemented path with a considerable inclination, remaining in Caminho Rural das Lagoas until it merges with the regional road. Turn left and, immediately after, walk up the shortcut on your right that will guide you to Poço Grande. This shortcut, known as Caminho Fundo, goes through clayey soils amid pastures, with the centre of the village of Santa Bárbara in the background and Pico Alto in the vicinity.

As you reach the houses of Boavista, turn left, cross the bridge over Santa Bárbara stream and you will again arrive at the initial point of departure, the square where the parish church of the village is located.



TRAILS OF THE AZORES



PR4 SMA

Santo Espírito - Maia

Difficulty: Easy Extension: 4 km Time Average: 2:00h Category: Linear



PR4 SMA Santo Espírito - Maia

This trail begins in the centre of the village of Santo Espírito and connects this locality to Maia. It is important to mention that there is no mobile phone coverage where the trail ends. Therefore, it is advisable to arrange beforehand a time to meet with the person that will be collecting you or the group.



According to historian Gaspar Frutuoso, it was in this village that the "first mass dedicated to the Holy Spirit took place...from then onwards to this day, this village has been named Espírito Santo (Holy Spirit)". Throughout the last years, its population has been dwindling and today its inhabitants are slightly more than 600.

The information panel of this trail can be found beside the church of Nossa Senhora da Purificação, which dates back to the 17th century, although it was restored and amplified during in the 18th century. It presents a baroque facade, decorated with elements of basaltic stone, making it look robust. The bell tower is a dome covered in tiles that, according to some locals, came from the chapel honouring the Holy Spirit that was built in a nearby place.

Go down Rua João Freitas Pereira amid the dispersed houses of this village and, 500 metres after, turn right into the path of Canada do Moinho (Path of the Windmill) which, as the name suggests, will lead you to the old windmill of Lapa, built at the beginning of the 20th century. You can still discern a great part of the original structure. These mills were built in an epoch in which agriculture, especially corn, was the main economic activity of the local population and was one of the principal exports of the island. These windmills were built in places where hydric resources were scarce and, given that watermills were not feasible, this was an efficient

PR4 SMA Santo Espírito - Maia

alternative. The windmills found on Santa Maria are cones made out of stone, with two floors, covered by a gyrating wooden done that is activated by three exterior rafters fixed on three salient wooden bars. There are two to three windows on the upper floor and one or two in the bottom floor. Normally there are two doors on diametrically opposed sides.

Take a right on the shortcut and, soon thereafter, continue amid the woods of *Pittosporum undulatum*. Cross the gate and continue walking on the pasture ahead until you reach the opposite side of the wall. Continue walking right on the dirt road that descends amid the pastures, in the direction of Lapa de Baixo. Approximately 700 metres later, the path is surrounded by arboreal species, such as the native *Morella faya*. When you see the signpost indicating a turn to the left, take the small shortcut that will lead you to a zone of water springs, once used for washing clothes. Go up the small staircase and continue walking on the path that leads to the riverbed of Ribeiro do Aveiro. Do not cross the stream now. Continue walking on the left side of the stream's bed in the direction of its mouth and, as you get close to the cliff, cross the stream and continue walking on the coastal shortcut, flanked by exemplars of *Agave americana*, *Pittosporum undulatum* and the native *Morella faya*.

Pause for a moment to contemplate the impressive waterfall of Cascata do Aveiro, approximately 80-metres high, and the small pond at its base. Moreover, you will have the opportunity to observe several vine-yard corrals that are a part of the Protected Landscape Area of Baía da Maia, which you will cross.

Continue on the shortcut, heading to Maia. Its inclination becomes increasingly steeper, so we recommend that you walk calmly and carefully. Descend the staircase amid the vineyard corrals and soon you will get to the road of Maia. Ahead, you will find 4 information plaques, two of which concerning the small trail you are hiking now. If you wish to take the



PROTECTED LANDSCAPE AREA OF BAÍA DA MAIA

Situated in the southeasternmost part of the island, Baía da Maia is surrounded by high cliffs that provide shelter from the dominant south-western winds. These geographical attributes, allied to the highest average temperatures in the archipelago, are ideal conditions for vineyards. For this reason, the hill-sides are filled with corrals made of basaltic stone wherein one finds vineyards. We should mention the arduous labour and the human strength that is required to transport the grapes from some of the most elevated zones to the bay and, later, to the centre of the village of Santo Espírito.

PR4 SMA Santo Espírito - Maia

detour on your left leading to the mouth of the stream Ribeira do Aveiro, walk 300 metres on asphalt and the final part of this shortcut that will lead you to a small leisure area, located at the base of Cascata do Aveiro, where you can observe this geosite that offers the possibility of seeing an important vulcanological phenomenon known as "pillow lavas".

Cross Maia, contemplating the landscape dominated by the vineyards and the Gonçalo Velho Lighthouse in a dominant position of the hilltop. You will pass by some restaurants until you reach the natural pool of Maia. Although the official trail ends in this pool, we recommend you to walk until the lighthouse, with the possibility to visit the ruins of the ancient whaling factory nearby. Therefore, when you get to the first sharp curve, take the narrow shortcut ahead, amid houses and vineyards, which goes up a stone staircase, until it reaches the road again. Take a left on the asphalt road and walk in the direction of lighthouse. It was built on the top of Ponta do Castelo in 1927 and owes its name to the navigator that discovered the island. Its tower is 14-metres high and includes a living space. It should be mentioned that every Wednesday the lighthouse is open to visitors. You can go up the tower in the afternoon between 2 pm and 5 pm. If you are hiking this trail on any other day of the week, ask the lighthouse keeper if you can go up the tower.

The final part of the trail is located on a shortcut on the right of the lighthouse which descends in an S-shaped path to the ruins of the old Whaling Factory. You will encounter several species of the endemic flora in this area, especially *Spergularia azorica*, *Euphorbia azorica*, *Festuca petraea*, *Azorina vidalii* and *Lotus azoricus*. You are in a protected zone of the Natural Park of the island, the so called *Protected Area for the Management of Habitats and Species* from Ponta do Castelo. We should mention that Ponta do Castelo is one of the most important geo-landscapes of the island, where it is possible to observe a fossiliferous deposit of marine organisms. When you finish the trail, you will have to take the same shortcut to the vicinity of the lighthouse of Farol do Gonçalo and wait for your ride.



TRAILS OF THE AZORES



PR5 SMA

Costa Sul

Difficulty: Medium Extension: 7 km Time Average: 3:00h Category: Linear



PR5 SMA Costa Sul

This trail begins at Vila do Porto, more precisely at Forte de São Brás, a military building, built in the beginning of the 18th century, to protect the village from the attacks of corsairs and pirates. From a geological point of view, this is an interesting trail. There are several information panels here since this is the starting and finishing point of the Santa Maria Great Route.

Turn left near the information panel and take a shortcut that descends to the path Caminho do Calhau da Roupa. When you reach the asphalt road, turn right and walk for 20 metres. Soon after, turn left toward the stream Ribeira do São Francisco. Thereafter, at the mouth of this stream there is a confluence of seawater and stream water, an excellent habitat for some bird species, such as *Gallinula chloropus*, *Numenius phaeopus*, *Arenaria interpres*, *Ardea cinerea*, *Egretta garzetta* and *Sterna hirundo*.

After crossing the bridge over the stream, you will enter a new protected zone of the Santa Maria's Natural Park, which extends until the end of this trail, at Praia Formosa. This protected area is called Natural Monument of Pedreira do Campo, Figueiral and Prainha. Continue walking on the shortcut that goes up the hillside with a view to the marina, port, and Vila do Porto. Continue on the wide path and, around 1 km further ahead, you will arrive in the first fossiliferous deposit of this trail, Pedreira do Campo.

It comprises a quarry that is approximately 260 metres long, exposing a submarine geological sequence, which dates back around 5 million years, composed of marine sedimentary rocks rich in fossiliferous contents at its base. When it was in operation, volcanic rocks were extracted and transformed into gravel.

When you reach the end of the wooden walkway, continue walking on the pasture and cross over some stone walls. You will begin to see Ponta da Malbusca and a good part of the southern coast of the island, to which this trail owes its name. A bit further ahead you will reach an interesting geological formation, an embankment with an opening at its base, known as Gruta do Figueiral. This is an artificial cave from which clay and limestone were extracted and used in the manufacture of tiles and lime. For this reason, there is a shortcut next to the area, once commonly used by the locals. In this zone, you will also be able to appreciate the old Lime Furnace, where the materials obtained at Gruta do Figueiral were prepared to be later used in the typical houses of Santa Maria.

The trail continues amid some endemic vegetation, such as *Morella faya* and *Pericallis malvifolia*, introduced vegetation, such as the exemplars of *Pittosporum undulatum*, *Agave americana*, and *Opuntia ficus-indica*. With regard to the avifauna, you may see throughout this trail *Buteo buteo rothschildi*, *Columba palumbus azorica*, *Erithacus rubecula* and the *Regulus regulus sanctae-mariae*. Later, a clearing opens and the shortcut widens, with another ascent ahead. A few metres after you get to the Touril. Continue walking on the dirt road, passing by sheds in the surrounding pastures and a modern house with a fabulous view over Prainha and a great part of the southern coast of the island. A bit further ahead,

PR5 SMA Costa Sul

turn right into a dirt road path and continue in the direction of the edge of the hilltop, from where you can view Praia Formosa. Now, ahead of you, an S-shaped descent amid medium-size bushes. Caution is advised since the ground may be slippery.

You will reach the first white sand beach in this trail, the beach of Prainha. This beach offers access to another fossiliferous deposit of great paleontological interest in the natural monument. Just like Praia Formosa, the sand's colour is light since it resulted from carbonate rocks, unlike most of the darker Azorean beaches. It should also be mentioned that, given the difficulty in accessing Prainha, it is a perfect area to enjoy the sea in tranquillity. Ahead of you, the last kilometre of this trail. Take the shortcut beside the sea and walk safely, with ropes strategically placed to assist you in the descent. Further ahead you will cross an interesting small portico. This is where the shortcut ends. Continue amid the coastal rocks, paying attention to the trail's signposts. You will reach the ruins of the Forte de São João Baptista. A good part of its architectonic structure is still intact. Do not be surprised if you see some surfers in this area since Praia Formosa is the principal surf spot on the island, of great interest to the practitioners of surf, especially in the summer, when the waves coming from the south reach the islands.

When you get to the regional road you will find a plaque indicating the trail you have just completed. Turn right, where the trail ends, and you will find some restaurants and accommodation as well as the second white sand beach on this trail, the well-known Praia Formosa. If you wish to continue walking on the southern coast, you may choose to follow the signposts of the GR Foothpath and continue until the locality of Cardal, in Santo Espírito. We should mention that it is here that an internationally famous "world music" festival takes place, the *Maré de Agosto*. In a peculiar setting, in which the stage is located a few metres away from Praia Formosa, this music festival takes place every year, uninterruptedly, since 1984. It offers visitors of diverse origins to enjoy the concerts at night and rest on the beach during the day.



NATURAL MONUMENT OF PEDREIRA DO CAMPO, DO FIGUEIRAL E PRAINHA

It is located on the southern coast of the island, extending from the stream Ribeira de São Francisco (Vila do Porto) to Praia Formosa. It offers access to submarine volcanic rocks and maritime fossiliferous deposits that are unique in the Archipelago of the Azores. Rich in fossils, this rock formation dates back 5 million years and is considered a key element in the interpretation of the maritime processes of the North Atlantic, especially those related to sea-level oscillations.

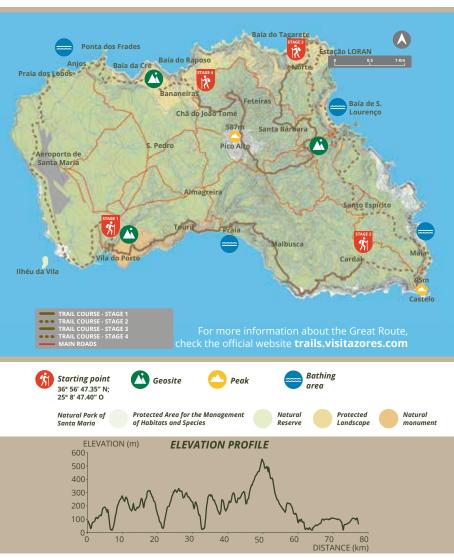
TRAILS OF THE AZORES



GR SMA

Great Route of Santa Maria

Difficulty: Medium Extension: 78 km Time Average: 28:30h Category: Circular



GR SMA Grande Rota de Santa Maria

The Great Route of Santa Maria is a circular trail, beginning at Vila do Porto, more specifically at Forte de São Brás. It goes around the oldest island of Azores (+/- 8 million years), a rich trail from geomorphological, paleontological and cultural points of view. The Great Route is divided into four phases, each with approximately 20 km each. Accommodation for overnight stays between stages is available.

The trail comprises coastal paths, from where we can observe rocky cliffs of considerable height and scenic value, many of vineyards in quarters or terraces bounded by small walls of volcanic stone, such as the hillsides of Baía da Maia, Ponta do Castelo and Baía de São Lourenço. These coastal paths also provide access to various swimming areas, such as the two main beaches - São Lourenço and Praia Formosa - both white sanded, since the accumulation of sediments results from the erosion of carbonated rocks, contrary to what happens in all other beaches of the archipelago. In addition, this trail also offers the chance to visit the interior of the island, especially its highest point, Pico Alto, at 587 metres of altitude.

From a cultural point of view, the trail offers the possibility of visiting places that date back to the settlement of the Azores, with Santa Maria being the first island to have been discovered. Places like the historical zone of Vila do Porto and Anjos, where the first colonizers settled and where the oldest chapel in the Azores was built, are veritable cultural relics. Moreover, you can also pass through the residential area of Santa Bárbara, where the uneven terrain contributed to the spatial distribution of houses, with most exhibiting a type of construction that is typical of the island.

As to palaeontology, we highlight the various deposits of fossils, such as Pedreira do Campo, Prainha and "Pedra que Pica" - Ponta do Castelo, each containing various fossils and old rock formations (dating back 5 million years) that are considered key to the interpretation of marine processes in the North Atlantic, especially oscillations in sea levels.

Since the average time for each stage is greater than six (6) hours, hiking this trail should be planned in accordance with the availability and physical condition of each hiker. Places to stay overnight include Rural Tourism Units and Hostels (B&B), as camping in the wild is prohibited in the Azores.





TRAILS OF THE AZORES



SÃO

PR1 SMI

Vigia de São Pedro

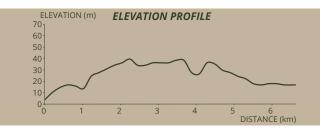
Difficulty: Easy Extension: 6,5 km Time Average: 2:00h Category: Linear





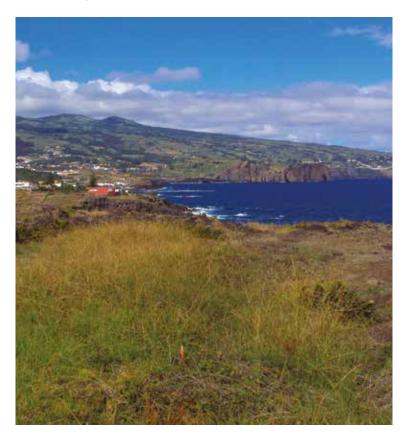






PR1 SMI Vigia de São Pedro

This trail is located on the northern coast of the island, connecting the natural oceanic pools of São Vicente Ferreira to the village of Calhetas. The trail includes areas of great geological and natural interest and its seafront has been classified as a *Protected Area* by the island's Natural Park Authority.



Start at the parking lot located at the oceanic pools of Poços and continue walking on the pedestrian walkway of Rua do Sertão. In the first few metres of the trail, you will find signposts with information concerning the old Whaler Factory at Poços and an ancient whaling boat. The building was abandoned when whaling ended and is now derelict. Presently, only its chimney can be seen.

700 metres later, turn left at Canada do Ferreiro and walk towards the coastline. Pause for a moment, look westward and appreciate the interesting geological structure of the Morro das Capelas with its cone of volcanic tuffs that were formed during a very explosive phreatomag-

PR1 SMI Vigia de São Pedro

matic eruption. It should be noted that this hill or *morro* is an important nesting area for several oceanic birds, such as the *Calonectris diomedea* borealis and the *Puffinus assimilis*.

Continue walking along the coastline pathway and you will find fine exemplars of the local flora, such as the *Festuca petraea* and the *Picconia azorica*, and others that were introduced by settlers, such as the *Opuntia ficus indica*. 400 metres further ahead, when you reach the dirt road, take a left and head in the direction of Fenais da Luz. On your right, you will be able to easily see an alignment of volcanic cones, known as the Peaks Region. This area is characterised by the existence of an axial NW-SE zone with aligned cones of slags, from which volcanic flows descended, forming a relatively smooth inclination extending both northwards and southwards in this part of the island.

Continue on the dirt road, curve rightwards and you will be able to see the village of Fenais da Luz ahead, as well as Ponta da Calheta and, in the distance, the Mountain Range of Água de Pau. A bit further ahead you will find the Bairro de Nossa Senhora da Luz. Go left, around the houses, and take a right at Rua 6 de Junho and keep walking until you reach the regional road. Then take a left and continue walking towards the centre of the village of Fenais da Luz, where you will find the square of the church of Our Lady of the Light. The exterior architecture of this church dates back to 1756. It is considered a pilgrimage site, visited by believers that wish to thank Senhora da Luz for her divine graces.

Take a left towards Rua de Baixo and then take a right. As you walk the next kilometre, you will traverse the village, finding houses where it is still possible to see basaltic masonry. At the intersection of Rua dos Combatentes do Ultramar with Rua de São Pedro, take a right and head towards the small leisure area where you will find stone benches. You will then walk away from the houses, returning to the dirt road where cars are not allowed due to the geological instability of the steep coastline.



WHALER FACTORY

Whaling started on the island of São Miguel at the beginning of the second half of the nineteenth century, in a place known as "Calhau Miúdo", in the village of Capelas. The first whaling industries were established there to work on the whales that were towed by small whaling boats. It was near this place, more precisely at Poços, that a whaler factory was built in 1945, remaining in operation until the beginning of the 1970's. It was the first factory in the Azores that produced whale oil and flour.

PR1 SMI Vigia de São Pedro



300 metres ahead, you will be able to visit the Chapel of São Pedro on the promontory. A relic of the 16th century, it contains an ancient image of São Pedro. From this point of high land, you will be able to see the northeastern coastline of the island.

Shortly thereafter, you can take a left and head towards Buraco of São Pedro, an interesting geological formation that should be observed with great caution due to the danger of falling. After taking the detour, continue walking on the coastline that is laden with interesting geological profiles of pyroclastic and paleosol that resulted from the mix of lighter and reddish shades of volcanic flows. Bays are common in this part of the trail and are perfect habitats for some nesting marine birds that we have already mentioned.

A bit later you will reach the area of the hotel and, as you step onto the asphalt, continue walking the last 500 metres of the trail, heading towards the centre of the parish of Calhetas. The trail ends next to the church of Calhetas.

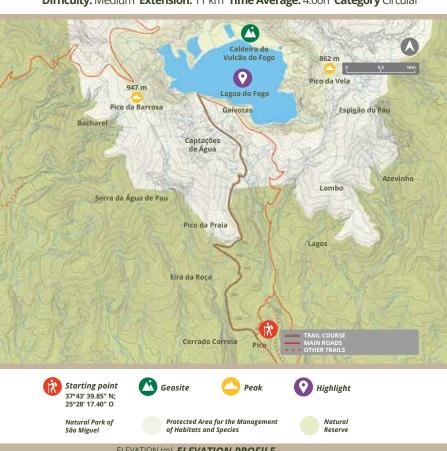
TRAILS OF THE AZORES

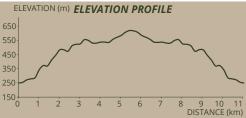


PRC2 SMI

Praia - Lagoa do Fogo

Difficulty: Medium Extension: 11 km Time Average: 4:00h Category Circular





PRC2 SMI Praia - Lagoa do Fogo

This trail is situated in the central zone of the island of São Miguel, in the volcanic massif of Serra de Água de Pau. Lagoa do Fogo, the second biggest lake on the island with a maximum depth of 30 metres, is a part of this volcanic mountain range. The trail is located entirely within a *Natural Reserve*. In addition to its magnificent landscape and its exuberant biodiversity, Lagoa do Fogo is also a remarkable cultural-historical heritage site.



To find this trail take regional road 1-1 on the southern side of the island. In an area near the beach, you will see a bridge in the middle of a curve and a cemented road (Rua Caminho do Lugar da Praia) that ascends steeply. Walk up this road of 1,3 km and you will find a fork and an information panel indicating the beginning of the trail.

Begin your hike following the pathway on your left. Walk for about 400 metres in relatively flat terrain until you find a crossing close to a reservoir. Take a right and continue heading north. In this phase of the trail, you will notice that the steepness of the trail is increasing and that you are ascending to a higher altitude. You will find that the vegetation

PRC2 SMI Praia - Lagoa do Fogo

around you is composed of various species, of which we highlight exotic trees such as *Pittosporum undulatum* and *Acacia melanoxylon*, and some common invasive species such as *Solanum mauritianum*, *Lantana camara* and *Hedychium gardnerianum*.

Continue walking up, ignoring some minor detours that will appear 1 km ahead, situated in a pasture on your right side, and some derelict buildings, architectonic vestiges of a factory of defibration of *Phormium tenax*. Popularly known as *espadana*, the leaves of this plant, which you will occasionally find as you ascend further, were processed and used in the making of ropes and coarse textiles. It is said that the factory started operating in the 1920s but ended in the 1960s when its exportation was no longer lucrative.

Now you are at an altitude of 300 metres and from here you can appreciate a beautiful panoramic view of Vila Franca and its islet. Follow the signs and continue walking upward. You will find some more forks on the pathway. You should veer to the left and then to the right, without leaving the main pathway. On both sides of the trail, you will see exemplars of *Tetrapanax papyriferum*, an arboreal species from southern China. You will also find young eucalyptus trees, a reminder that a few years ago this hillside was covered by these large trees that were used



SPORT FISHING IN LAGOA DO FOGO

On the island of São Miguel it is possible to sport fish in some lakes, lagoons and streams, particularly in Lagoa do Fogo.

The rainbow trout or *Oncorhynchus mykiss* is the species preferred by fishermen. It was introduced in the Azores more than 100 years ago and its presence in Lagoa do Fogo is guaranteed by the periodic repopulation of stocks that have been raised or farmed in the nurseries administered by the Regional Directorate for Forest Resources. This entity, responsible for the management of fish species and for the regulation of fishing activities, oversees the annual production of approximately 15,000 rainbow trouts on the island of São Miguel, destined exclusively to the repopulation of the lakes, lagoons and streams found on the island.

The fishing season of the *Oncorhynchus mykiss* at Lagoa do Fogo begins in May and ends in October. In order to guarantee that the ecological necessities of the species are assured and their habitats protected, there are rules concerning fishing in the lakes, lagoons and streams, namely: where you can fish, periods in which fishing is suspended so as to enable replenishing stocks, minimum sizes of fishes, maximum number of fishes to be captured, maximum number of fishes to be captured, what kinds of baits and fishing practices can be used.

PRC2 SMI Praia - Lagoa do Fogo



for industrial purposes. At a certain point, the trail is flanked by *Cryptomeria japonica* trees and the knowledgeable observer will notice some dispersed exemplars of *Platanthera micrantha*, an orchid endemic to the Azores. A few minutes later you will find an aqueduct built in concrete, one of the first of its kind in the Azores. The water that flows through it supplies the hydroelectric plant, Central Nova.

Continue walking and enjoy the incredible views of the southern coast of the island and of the southern flank of the volcano, amid exemplars of endemic species such as *Vaccinium cylindraceum*, *Erica azorica*, *Viburnum treleasei*, *Myrsine retusa*, and many others...Further, into the canal, it is possible to see some fishes that swim frenetically back-and-forth as if searching for an exit. Among these, the rainbow trout or *Oncorhynchus mykiss*, a species that is released annually in Lagoa do Fogo.

After walking 2 km, you will reach a valley with imposing cliffs, guarded by a numerous colony of seagulls (*Larus michahellis atlantis*) that nest here between April and May. Walk in the direction of the northern side of the volcano, passing by small structures used to extract water. You will finally reach the margin of Lagoa do Fogo, 600 metres above sea level. To your left, you will see Pico da Barrosa, the highest point of this volcanic massif at 950 metres of altitude. Now is time to rest and replenish the body with a refreshing dive in the lake. Take the same path to return.

TRAILS OF THE AZORES



MTGUEL

PR3 SMI

Vista do Rei - Sete Cidades

Difficulty: Easy Extension: 7,7 km Time Average: 2:00h Category: Linear







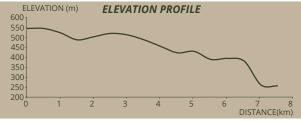




Natural Park of São Miguel



Protected Landscape



PR3 SMI Vista do Rei - Sete Cidades

This trail is located in the northwestern part of the island of São Miguel and extends into the Crater of Sete Cidades, a Protected Landscape Area included in the Rede Natura 2000 (Nature Network 2000). This crater, formed by successive collapses, is one of the largest craters that can be found in the Azores. Its interior contains Lagoa das Sete Cidades, a landscape that was elected as one of the 7 Natural Wonders of Portugal in the category of Non-Maritime Aquatic Zones.



The trail begins at the Miradouro da Vista do Rei (Kings' Belvedere), a postcard location, the name of which was derived from the fact that King D. Carlos and Queen D. Amélia visited it on July 6th of 1901.

After appreciating the view, you will find to the left of the Belvedere an information panel concerning the trail. Consult the map of the trail and continue walking on the dirt road ahead of you. At the beginning of the trail, you will see, to your right, a steep shortcut. Do not take that route. Stay on the pathway that extends around the edge of the western crater of Caldeira das Sete Cidades.

Surrounded by hedges of *Hydrangea macrophylla*, a shrub that flowers in June and is found in all islands of the Azores, this trail offers fine views of the crater of Sete Cidades, with its blue and green lagoons on one side and, on the opposite side, beautiful panoramic views of the western coast of the island.

PR3 SMI Vista do Rei - Sete Cidades



Approximately 3.5 km into the trail, a descending detour will appear on your left. Ignore it and stay on the same dirt road until you reach the intersection the regional road that connects the village of Mosteiros to Sete Cidades.

At that same intersection, a few metres to the left, you can also appreciate the magnificent view of the village of Mosteiros and its islets from the Belvedere of Lomba do Vasco.

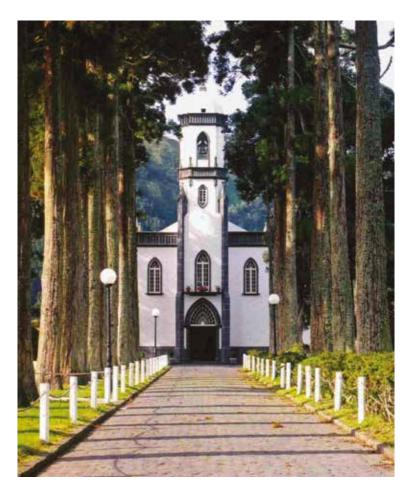
Continue by taking a right, choosing the regional road, descending towards the village of Sete Cidades. Walk a further 600 metres and you will find a dirt road on your left. Advance for a few minutes along that pathway, until you find the intersection of this trail with trail PR4 SMI Mata



THE LEGENDS OF SETE CIDADES

Legends concerning Sete Cidades (Seven Towns) abound in the local oral tradition, the most popular of which tells of a mythical kingdom where a princess, in one of her daily walks in the countryside, met a shepherd for whom she fell hopelessly in love. After several fortuitous encounters, an immense love grew between them. The King, upon learning of the romance of his daughter, prohibited any further meetings of the two youngsters. They met for the last time but, whilst bidding farewell, they cried so profusely that the tears they shed formed two lagoons: one blue, the colour of the princesses' eyes, and the other green, the colour of the shepherd's eyes.

PR3 SMI Vista do Rei - Sete Cidades



do Canário - Sete Cidades. Take a right on the shortcut known as Arrebentões, heading towards the village, passing by a small water tank, used to quench the thirst of the cattle that abounds here. A part of this trail is steep. We recommend caution against slipping hazard whilst descending.

The trail leads to the margin of Lagoa Azul (Blue Lagoon). Follow the pathway that surrounds the margin of the lagoon until you find the Store of the Park of Lagoa das Sete Cidades. We recommend that you visit an area dedicated to the geological/biological interpretation and promotion of the Natural Park of São Miguel. After this visit, turn right on the next street and walk straight ahead, turning right again on Rua de Baixo street. Walk the last few metres to the centre of the village, where you will find an 18th-century church, the church of Saint Nicholas. The trail ends here.

TRAILS OF THE AZORES

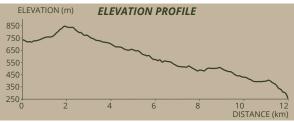


SÃO MTGUEL

PR4 SMI

Mata do Canário - Sete Cidades





PR4 SMI Mata do Canário - Sete Cidades

The Caldera of Sete Cidades is located in the western part of the island of São Miguel. The caldera's circular structure, 5.3 km in diameter, resulted from the subsidence of the superior part of the original cone, which contained four lagoons in its interior: the Blue one (Azul), the Green one (Verde), Santiago and Rasa. This crater houses one of the largest lake water reservoirs found in the archipelago. The trail proceeds along the upper northern edge of the crater.



This trail begins next to the road, near Mata do Canário, where you will find a spot to park your car.

Follow the asphalt road that is located next to the old stone aqueduct that was used in the 17th and 18th centuries to extract and transport water to the public fountains of the city of Ponta Delgada. It is no longer used. Approximately 300 metres ahead, you will find Muro das Nove Janelas, thus called because of the nine arches that comprise the superior part of the aqueduct. You should then walk 1 kilometre in the pumice pathway, flanked by *Cryptomeria japonica* trees. Among the lower vegetation, it is possible to find communities of *Equisetumm telmateia* and some rare

PR4 SMI Mata do Canário - Sete Cidades

exemplars of *Platanthera micrantha*, an orchid indigenous to the Azores.

At a certain point, you will find a cemented path that ascends steeply. Advance a further 500 metres, until you reach the northern edge of the crater that encircles the blue lagoon.

While going up the path, you can stop, look back and enjoy a panoramic view of the central and eastern parts of São Miguel as well as of the northern and southern seacoasts, simultaneously. At approximately 800 metres of altitude, interesting specimens of the indigenous flora, such as the *Erica azorica*, *Angelica lignescens*, *Hypericum foliosum* and *Leontodon filii*, appear on the left side of the pathway.

When you find a concrete structure with a sign with "NAV" written on it, you have reached the top of the pathway. This is an *Omni-directional Range VHF*, a conventional radio navigation system for aeroplanes, a technology that reveals the geo-strategic importance of these islands in Atlantic air crossings. From this point forward the cemented path ends and is replaced by a dirt road. A few metres further ahead, on your left, you will see a geodesic marker of the 850 metres of the altitude of Pico da Cruz, the highest part of the trail. From this elevated point, you can enjoy an astonishing view of Caldeira das Sete Cidades, with the Atlantic Ocean in the background.

Return to the main road and continue descending. There is a crossing 200 metres further ahead. Remain on the left.



PR4 SMI Mata do Canário - Sete Cidades



Go around the edge of the crater, always keeping the Blue Lagoon to your left. Approximately 4.5 km later you will reach a crossing with a belvedere. The existence of some concrete tables and seats indicate that this is the ideal place to rest and replenish the body. The view is impressive! We can see Lagoa Verde, Lagoa Azul and the picturesque village of Sete Cidades. Surrounded by forests of *Cryptomeria japonica*, we can see geological structures that resulted from secondary intra-caldera eruptions. On your right, you will see Caldeira Seca and Caldeira do Alferes and, on your left, the craters or cones containing the lagoons of Santiago and Rasa.

Continue walking along the dirt road in the same direction. Approximately 3.5 km ahead, you will find the intersection of this trail with trail PR3 SMI, Vista do Rei - Sete Cidades. Take a left at Arrebentões shortcut and head toward the village

Take a left on the shortcut known as Arrebentões, heading towards the village, passing by a small water tank, used to quench the thirst of the cattle that abounds here. A part of this trail is steep. We recommend caution whilst descending.

The trail leads to the margin of Lagoa Azul (Blue Lagoon). Follow the pathway that surrounds the margin of the lagoon until you find the Store of the Park of Lagoa das Sete Cidades. We recommend that you visit an area dedicated to the geological/biological interpretation and promotion of the Natural Park of São Miguel. After this visit, turn right on the next street and walk straight ahead, turning right again on Rua de Baixo street. Walk the last few metres to the centre of the village, where you will find an 18th-century church, the church of Saint Nicholas. The trail ends here.

TRAILS OF THE AZORES



SÃO

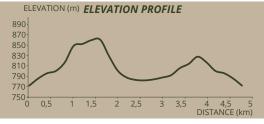
PRC5 SMI

Serra Devassa

Difficulty: Medium Extension: 4,9 km Time Average: 2:00h Category: Circular

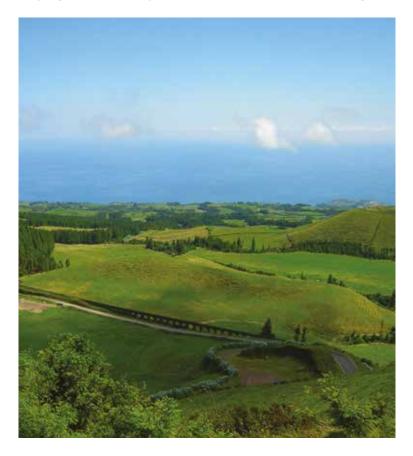






PRC5 SMI Serra Devassa

This trail is situated on the southeastern side of the volcanic massif of Sete Cidades, in a mountainous area with fifteen small lagoons known as Serra Devassa. Taking into consideration the altitude of this trail, which ranges between 750 and 900 metres, it is advisable to hike it when visibility is good. Otherwise, you will not be able to see some of the lagoons.



Head to the vicinity of Lagoa do Canário, surrounded by a wood of *Cryptomeria japonica*, where you will find a clearing that is used as a car park by visitors and by those wishing to hike this trail.

Begin by walking up the shortcut, amid pastures that are common at these altitudes. Species such as *Calluna vulgaris*, *Juncus sp.*, *Ranunculus cortusifolius*, and the endemic *Festuca francoi* e *Holcus rigidus*, as well as several concentrations of *Sphagnum sp.* of different tonalities can be found in these slopes, due to the high levels of humidity in this zone throughout the year.

PRC5 SMI Serra Devassa

After walking for 400 metres you will find a fork, take a left, cross the S-shaped gate ahead of you. Soon thereafter, in a flatter area, go around the hill ahead of you and, before continuing the climb, enjoy the view before you. We highlight the northern coastline and the volcanic massif of Água de Pau as well as Muro das Nove Janelas, an aqueduct built in stone, used for transporting water from this mountainous region to the city of Ponta Delgada.

Continue walking up, ignoring all detours for the next 300 metres, until you find a panel informing you of a detour to the right that will lead you to the lagoons. Go up the improvised staircase and, on your right, look at one of the walls of the Caldeira das Sete Cidades and, 150 metres ahead, take a small detour to the wooden belvedere from where you can view the first lagoon of this trail. Take the shortcut that goes around the lagoon and, on the new fork, choose the shortcut on the middle that will take you to the top of the slope, where you will find a wooden belvedere, next to a geodesic marker. From here onwards, in addition to being able to see the northeastern coast of the island to your right, you can also see Lagoas das Éguas standing next to each other from another perspective. At this point, one realises that the volcanic mountain range of Serra Devassa, which stretches in a northern-southeastern direction, is located in the southeastern limit of Caldeira das Sete Cidades and that the majority of the existing lagoons are located inside craters that were formed by basaltic slag that resulted from volcanic explosions.



PRC5 SMI Serra Devassa



Take the shortcut that goes down the slope until you find a small staircase that will guide you to a dirt road that is flanked by large embankments where it is possible to observe deposits of volcanic materials that resulted from explosive eruptions, such as pumice, the formation of which was caused by eruptions of Vulcão das Sete Cidades.

A bit further ahead you will see exemplars of *Cryptomeria japonica*, forming a barrier to the lagoon, which is located on the left side of the caldera - Lagoa Rasa. In the next fork take a left, among some exemplars of *Calluna vulgaris*. Do not be surprised if you see some *Columba palumbus azorica* flying in the vicinity. After passing by a kind of stone shelter, which in fact is the entrance to a cave that you should not enter, you can make a small detour of 20 metres to your left and get closer to Lagoa Rasa. Here you realise that you are on lower ground, in a depression situated in the midst of volcanic cones. Go back to the dirt road and continue going around the lagoon until you find a panel that informs you about the detour leading to Lagoas Empadadas (350 metres). Do take this worthwhile detour, through a "bagacina" (name given by the locals to red *lapilli*) pathway, on your right.

After taking the detour, take a narrow shortcut to your right, moving away from Lagoa Rasa. You will pass by some exemplars of *Cryptomeria japonica* and other spots with *Sphagnum sp.*, which indicate high levels of humidity for most of the year. Further ahead, as a clearing appears in the vegetation, you realise that you are back to the place where you took a detour to Lagoa das Éguas. Go straight ahead and repeat the initial trail, this time in the opposite direction, until you return to the point where you started this trail.

TRAILS OF THE AZORES



PRC6 SMI

Lagoa das Furnas

Difficulty: Easy Extension: 9,5 km Time Average: 3:00h Category: Circular





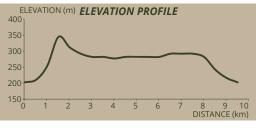












PRC6 SMI Lagoa das Furnas

This trail is located in Furnas Valley, a *Protected Landscape Area*, part of the island's Natural Park. Beginning and ending in the interior of the village of Furnas, this trail goes around the extensive lagoon, providing access to important cultural and natural sites, notably a diverse hydrothermal system that includes geysers, thermal and mineral waters.



Head to the centre of the village of Furnas, more precisely to Largo das Três Bicas, where you will find the panel with information concerning the trail. At this place, in addition to the panel, you may observe, on your left, an old fountain and, on your right, the house where the 20th-century musician and composer Benjamim Rodrigues, a native of Furnas, lived.

Go straight ahead on Rua Padre José Tavares, passing by Cine Teatro Vale Formoso and, if you so choose, you can make a detour a bit further ahead at the junction, taking a left and visiting the iconic Park Terra Nostra, where you can observe a great variety of bushes and trees, some more than 200 years old, and enjoy a relaxing bath in the thermal pool.

Continue walking on Rua da Igreja, so called because of the Church of Sant'Ana, built in the 18th century. 300 metres after passing by the church, at the junction, you can take another detour to Poça da Dona Beija, where you can visit the thermal water pools. Next, continue walking on a street named Rua das Águas Quentes for 300 metres until you

PRC6 SMI Lagoa das Furnas

find a new junction. Go up the cemented pathway on your right, with a panel at the beginning - Areeiro Miradouro do Lombo. This steep pathway shall guide you to an asphalt road. Turn left towards the antennas to visit the Belvedere of Pico do Milho, where you can enjoy a magnificent vista of the Valley of Furnas, where the village is located.

Go down the road that is flanked by exemplars of *Cryptomeria japonica*. A bit further ahead the road becomes flatter, in a zone where pasture land abounds. Continue walking on the right side until you find a junction with a cobbled stone road. The lagoon will be straight ahead. Continue walking on the left side and take a small shortcut located on the margin of the lagoon. After 1 km of walking, in the vicinity of a car park, take the road on your right hay is flanked by Araucaria heterophylla. As you approach again the margin of the lagoon, you will notice Chapel of Nossa Senhora das Vitórias, a chapel that was built by the illustrious Azorean José do Canto and inaugurated in 1886. It is a rare example of the neo-gothic architectural style, with thirteen ogive windows with stain glass depictions of biblical events. The woods that surrounds the chapel was also created by José do Canto, a part of the largest estate in Lagoa das Furnas. It occupies the southern margin of the lagoon and stretches inwards Salto do Rosal. We should mention the existence, in the lower areas, near the margin of the lagoon, of a garden amidst the woods. It was designed and planted in the middle of the 19th century. We should highlight some species that are found there, such as Quercus robur, Fagus sylvatica, Seguoias sempervirens and Chamaecyparis lawsoniana.

Continue walking, passing by ruins of old furnaces used in the produc-



FURNAS

Furnas, once morphologically identical to the mountain of Pico, was the site of a volcanic cataclysm that resulted from explosive volcanic eruptions that occurred 30,000 years ago. These eruptions caused the collapse of the crater and the subsequent formation of a large lagoon within it. The geomorphological and hydrological singularity of Caldera of Furnas results from manifestations of secondary volcanism, such as geyser fields and thermal water springs. These geological attributes ensured its classification as a *Landscape Protected Area*.

The combination of its natural and cultural attributes makes Furnas a superb landscape with magnificent vistas, diverse and rich vegetation, various thermal and mineral springs, and the gastronomical delights cooked in geysers, such as the typical Furnas' cozido.

PRC6 SMI Lagoa das Furnas

tion of coal and by some tourist lodges. Soon you will reach The Furnas Monitoring and Research Centre, inaugurated in 2011. On the same project, several programs and initiatives for the Hydrographical Planning of Furnas Lagoon were included, such as the maintenance of its margins. Interactive expositions and documentaries are some of the tools used to promote a better understanding of the ecosystem of the lagoon and of the Valley of Furnas.

After visiting the Interpretation Centre, continue walking on a dirt road around the lagoon, until you reach the northeastern margin of the lagoon, where you will find the area of Caldeiras, another spot with geological manifestations of secondary volcanism, geysers. It is at this tourist spot that the traditional *Cozido das Furnas* is cooked beneath the earth. The ingredients are placed in a clay pot or a pan and then buried on the land surrounding the geysers for about 6 hours, cooking slowly on the volcanic heat that emanates from the ground. In this spot, you can also read and look at the panel near the lagoon, in which you find information concerning the bird species that can be watched, with their respective identification. If you are a birdwatcher this is an obligatory "hotspot" in your visit to the island of São Miguel given that it is possible to view most of the resident passerine species as well as aquatic migrating species from the Nearctic and Palearctic realms, such as *Ardea cinerea* and *Egretta garzetta*.

Walk a few more metres and read the panel that indicates the distance between your current location and the end of the trail (3,1 km). 200 metres later, at the junction, turn left on to the asphalt road, following the signposts pointing to Furnas, leaving the lagoon behind. When you approach a wall, you will find a signpost indicating a turn to the right, into a secondary road near a water stream, which you should take. After descending for 500 metres on this secondary road, you will find yourself at Rua das Águas Quentes again. Walk straight for the last 700 metres of this trail, back to Largo das Três Bicas.



TRAILS OF THE AZORES



PRC7 SMI

Pico da Vara

Difficulty: Hard Extension: 7 km Time Average:: 3:00h Category: Circular



PRC7 SMI Pico da Vara

This trail is situated on the easternmost part of the island of São Miguel, the oldest area of the island, where the land is more eroded and hilly, with ravines deeply embedded in the landscape, serving as pathways for torrential streams. Its principal attraction is the ascent to the highest point on the island, located at 1105 metres of altitude, at Pico da Vara.

Go to the beginning of this trail through a secondary road that connects the village of Algarvia to the vicinity of Pico Alto. In the trail's panel, you will also find the panel of the Natural Park of the island, with additional information concerning three *Natural Reserve of Pico da Vara*.

After observing the surrounding deep valleys, start going up a shortcut with an improvised staircase, made with some wood trunks. Flanked by several *Cryptomeria japonica* trees, this pathway will guide you to Planalto dos Graminhais, one of the several shortcuts that can be taken here, once used by the local population when they moved cattle about or searched for firewood.

After walking up for 1 km amidst *Cryptomeria japonica* trees you will be at 900 metres of altitude, a clearing opens and the surrounding vegetation changes substantially and graminoid plants become more prominent, hence the name given to this area - Planalto dos Graminhais (Graminoids' Plateau).

As you reach a fork, before turning left, look ahead and you will see, in the coastline, the village of Povoação, the first place to be settled on the island in the fourth decade of the fifteenth century. To your right, Planalto dos Graminhais, with its forested bogs, characterized by its low acidity and permanent wet muddy ground, ideal conditions for such endemic floral species as *Festuca francoi, Holcus rigidus, Sphagnum sp.* and *Polytrichum commune*. The forested area is comprised of endemic trees such as *Erica azorica, Vaccinium cylindraceum* and *Juniperus brevifolia*. It should be noted that Planalto dos Graminhais and Tronqueira are *Protected Areas for the Management of Habitats and Species*. Both areas have been maintained by several conservationist initiatives throughout the years, especially the elimination of invasive flora, reforestation of endemic species, recuperation of normal hydrological fluxes and the ecological restoration of more than 250 hectares of *Laurissilva* forest. These efforts are very important to the preservation of *Pyrrhula muriina*, an endemic bird of the Azores that only lives in this restricted zone of the island.

After having made a left turn, 500 metres ahead you shall find a memorial of an aircraft crash which took place in 1949, when an aeroplane from the French company Air France, which connected Paris to New York, crashed in this zone of the island. In terms of flora, we highlight the endemic *Deschampsia foliosa*, a graminoid or herbaceous plant that adapts perfectly to these altitudes.

In the last kilometre of the ascent to the highest point of Pico da Vara, you will pass by another marker referring to the fall of another aeroplane of the Portuguese Air Force in 1943. As you reach the geodesic marker of Pico da Vara, at 1105 metres of altitude, take some time to enjoy the views: southwards, Povoação; northwards, Nordeste and westward the volcanic massifs of Água de Pau and Sete Cidades. You can return by taking the same shortcut to the initial starting point. Have a good descend.

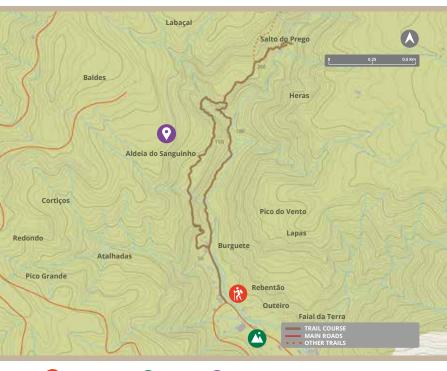
TRAILS OF THE AZORES



PRC9 SMI

Faial da Terra - Salto do Prego

Difficulty: Medium Extension: 4,5 km Time Average: : 2:00h Category: Circular



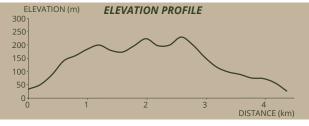






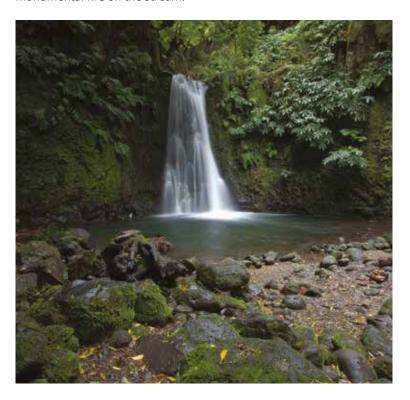






PRC9 SMI Faial da Terra - Salto do Prego

This trail is situated in the southeastern part of the island, in the municipality of Povoação, more precisely in the valley where the stream of Faial da Terra flows, dividing this small village in half. The name of this village, which is known to the locals as "the crib of the island", resulted from the once abundant *Morella Faya*. After its establishment, Faial da Terra expanded linearly, along with the coastline. It once was one of the principal whaling centres on the southern coast of the island of São Miguel. Today, with around 350 inhabitants, agriculture and services are its most important economic activities. Of its many festive traditions, it is worthwhile to attend the celebrations of São João (St. John) and the monumental fire on the stream.



The trail begins where the panel is placed, near a bridge, beside the bus stop. At Rua do Burguete there are various spots where you can park your car, in case you are driving there.

Begin your walk to the left of the asphalt road, passing by one of the village's two "Treatros" of the Holy Spirit, each with a crown at the top, one of the symbols of the Divine Holy Spirit, with the year 1908 inscribed on its facade. Approximately 300 metres ahead you will find a pathway in cobbled stone to your left and a trail ahead, next to the margin of the

PRC9 SMI Faial da Terra - Salto do Prego

stream. Continue on the asphalt road that soon becomes a dirt road. You will pass by an old windmill and its respective water canal, now derelict. As you advance you will see, on your right side, small parcels of land occupied with diverse gropes, including tobacco and corn, punctuated by orange and banana trees and other fruit trees. It is important to mention that fruits should not be picked whilst crossing the farms.

At this point, the terrain becomes stonier, covered with *Pittosporum undulatum* and *Acacia melanoxylon* leaves, species that abound in this area and which overshadow the trail. We can also see various *Canna indica*.

Continue walking on the trail which is delimited in some areas by small rope and wood sections. 800 metres ahead you will find a wooden bridge that you should cross, then turn left and go up a steep pathway until you find the second fork. You will start seeing small waterfalls formed by the water flow.

When you get to an intersection, turn right and continue on a pathway that alternates between ascents and descents, stony terrain and dirt road. At a certain time, you will find, on your left side, the shortcut that connects this trail to trail PR11 SMI - Trail of Ribeira do Faial da Terra.

Stay on the trail for another 300 metres until you reach the beautiful waterfall of Salto do Prego. Its sound is already audible. After some curves and after passing a barrier of *Bambusa sp.* you will see, among the *Pittosporum undulatum* and *Acacia sp.* trees, a 10-metre high waterfall, where you can stop for a rest and a refreshing bath.

You take the same pathway to return but before returning you can take



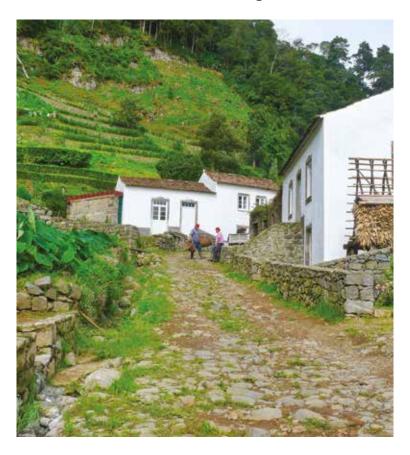
ALDEIA DO SANGUINHO

Located in the parish of Faial da Terra, its name was derived from the abundance of *Frangula azorica*, an endemic plant of the Azores and Madeira.

This small village was erected on the top of a valley instead of the coastline as a way of escaping frequent floods and oceanic storms whilst also ensuring that farmers could easily access their lands. The village was inhabited for more than a century but its geographical isolation and the incentive to emigrate lead its 200 inhabitants to leave. It was uninhabited at the beginning of the 1970s.

Presently, after a long process of rehabilitation of some of its architectonic structures, the small village of Sanguinho can accommodate 30 persons in small units of rural and agricultural tourism, as is evident in the small parcels of certified organic agriculture that surround its typical houses.

PRC9 SMI Faial da Terra - Salto do Prego



a detour on your right to see the upper part of the cascade. Return to the principal path and to the junction that connects with trail PR11 SMI, until you get to the second fork. At this place, you will see, on your left side, the path you took and, on your right, the trail you should take in order to head to the village of Sanguinho.

You will find a new wood passageway, cross it and less than 1km later you shall reach the small village of Sanguinho, an ancient settlement that owes its name to *Frangula azorica*, once abundant in this zone.

After enjoying the typical architecture of this small village, go down the curvy and inclined stone road and use this opportunity to appreciate the stunning vistas to the valley of Faial da Terra. In this final section of the trail, be cautions because in rainy days the ground may be slippery. The trail ends at the same point where it began. After the hike, explore the centre of the village of Faial da Terra.

TRAILS OF THE AZORES



PR11 SMI

Ribeira do Faial da Terra

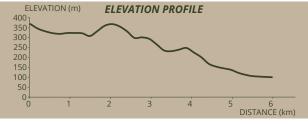
Difficulty: Medium Extension: 6 km Time Average: 2:00h Category: Linear





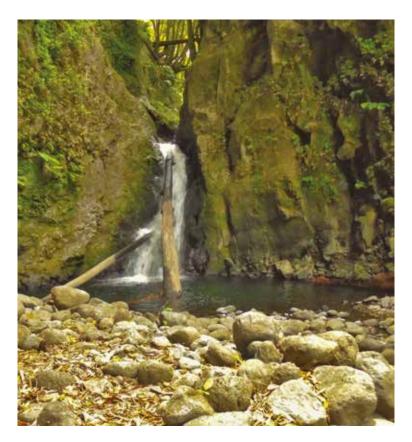






PR11 SMI Ribeira do Faial da Terra

This trail is located in the southeastern part of the island of São Miguel, more precisely in the Municipality of Povoação. It is a linear trail that traverses the valley where the creek called Ribeira do Faial da Terra flows, starting at the foothill of Serra da Tronqueira and ending in the village of Faial da Terra.



The trail begins on the regional road that connects Povoação to Água Retorta, in a place known as Paupique. An easy-to-find information panel, surrounded by *Platanus* (plane trees), can be found on the side of a road. Although described as a linear trail with approximately 3 km of length, you can choose to hike the remaining 3.5 km of trail PRC9 SMI Faial da Terra - Salto do Prego and head to the village of Faial da Terra. Hence the total of 6.5km (to Faial da Terra) that appears on the information panel.

Take the shortcut behind the information panel and hike among exemplars of invasive species, such as the Rubus ulmifolius and the Hedychium

PR11 SMI Ribeira do Faial da Terra



gardnerarum, and protected native species, such as the Woodwardia radicans. As you start hearing a stream flowing, the shortcut becomes an improvised steep and slippery stairway. Caution is advisable. Traverse one of the various pathways that lead to the trail next to the stream and, shortly thereafter, cross the wooden bridge, remaining on the shortcut that soon becomes flatter.

Approximately 1 km after having initiated the hike, there is a clearing and you are offered the opportunity to visit an old watermill. We should also highlight the centuries-old bridge over the stream, which can be observed by making a short detour to the riverbed. After a short pause, continue hiking among exemplars of arboreal ferns and native *Picconia azorica*, later supplanted by *Cryptomeria japonica*.

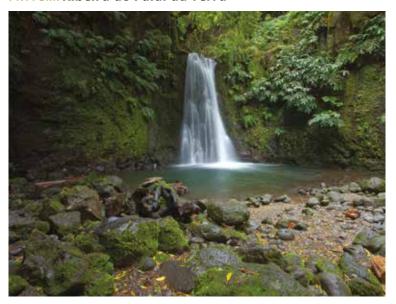


FAIAL DA TERRA

Located on the southeastern part of the island of São Miguel, in a small valley surrounded by steep hills, this village of the municipality of Povoação is home to a population of 359 inhabitants. The historian Gaspar Frutuoso called it the "Nativity scene of the island." Its name, Faial da Terra, was derived from the abundance of *Morella faya* in the area.

At the beginning of the 16th century, the first settlers were attracted by the beauty of the valley and by its fertile land. The sea was also an important natural resource for the people living here. Once this was one of the island's main whaling areas. Presently, the principal economic activity is agriculture.

PR11 SMI Ribeira do Faial da Terra



Move away from the riverbed, going up one of its sides, securing a higher and better perspective of the stream's waterline. Next, you will find an information panel that signals the Salto do Cagarrão. Do not desist from this minor detour of 200 metres that takes you to the first waterfall of this trail.

After the detour, take a left and continue walking up until you reach the highest point of this trail, near a pasture. Enjoy a panoramic view of the valley of Faial da Terra. Soon you will begin your descent toward Faial da Terra, crossing some slippery wood bridges with caution. The shortcut is shaded by arboreal species, such as *Pittosporum undulatum* and *Cryptomeria japonica*. After traversing an affluent of the main stream, you reach a point where the two trails that exist in this valley coincide. You can turn left and head toward Salto do Prego or take a right and continue toward Faial da Terra. The 300-metre detour will take you to a waterfall with a small pond at its base, an ideal place for a pause in the hike and for contemplating one of the most emblematic landscapes of this trail.

After the detour, proceed to the next bifurcation in the trail and take a left. Go down a cobbled pathway that will guide you to a bridge that traverses the stream where the water flow is greatest. An area with orchards approaches, the shortcut widens and becomes a dirt road that leads to an automobile road, already in the village of Faial da Terra. While you appreciate the houses, go down the asphalt pathway along the stream and walk the last 400 metres of the trail, up to the bridge, where you will find an information panel regarding another trail in this area, PRC9 SMI Faial da Terra-Salto do Prego.

TRAILS OF THE AZORES

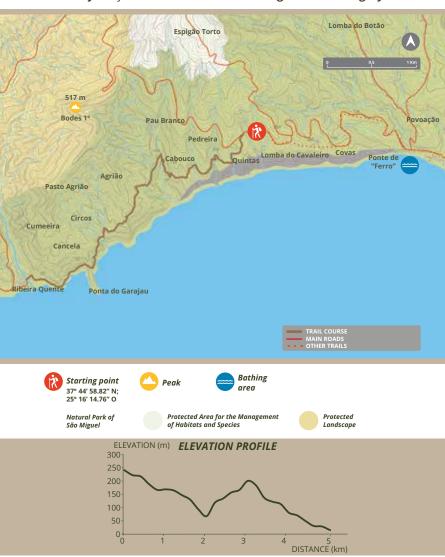


SÃO

PR12 SMI

Agrião

Difficulty: Easy Extension: 5 km Time Average:: 2:00h Category: Linear



PR12 SMI Agrião

This trail is located in the Municipality of Povoação and was officially sanctioned as an 8-km trail, connecting Povoação to Ribeira Quente. However, we chose to reduce 3 km to its length, the distance of the initial and less interesting walk from Povoação do Lomba do Cavaleiro, a high percentage of which is on asphalt.

Begin the trail at Lomba do Cavaleiro, next to a dirt road and some exemplars of *Platanus acerifolia*, where you will find a small information panel with the trail's map. This is the highest point of the trail. Walk down this pathway, traversing pastures and farms whilst enjoying a magnificent vista of the southeastern coast of the island, with Faial da Terra on your left and Ponta do Garajau on your right.

In the first phase of the descent, you will find exemplars of the native flora, such as *Erica azorica* and *Morella faya*.

Later, the trail reaches a point wherefrom it is possible to observe some of the orchards typical of Povoação, where fertile land and a favourable microclimate assure the existence of ideal conditions for the planting of fruit trees.

After traversing an area with orchards, go straight ahead at the junction. There will be some houses on your right side. As you reach the last house, turn left and take a narrow pathway, where you will find some exemplars of *Hydrangea macrophylla*, *Cryptomeria japonica*, *Osmunda regales* as well as some native species, such as *Erica azorica*, *Lauris azorica* and *Viburnum treleasei*. A few more metres of descent and you will reach the waterline. Traverse the stream with caution because of the slippery rocks and proceed to cross a small bridge that will lead you to a shortcut with *Acacia melanoxylon* and *Pittosporum undulatum* on the opposite elevation of the valley.

When you reach the dirt road that connects the coastal area to Cabouco, cross it and go straight ahead to the shortcut that is flanked by *Cryptomeria japonica*. 200 metres later, you will begin to see geological materials, such as pumice and ignimbrite, that resulted from episodic volcanic explosions and pyroclastic fluxes in the volcanos of Furnas and Povoação. Cross a small bridge, standing over the waterline. Take a left and continue walking on the coastal dirt road.

A bit later, you will find the Belvedere of Ponta do Garajau and, shortly thereafter, the Chapel of Santa Rita, the chapel that was built in honour of St. Rita when the village of Ribeira Quente was destroyed by an earthquake. Presently, in the exact spot of the old chapel, an altar with the original image of the Saint has been built.

Soon after the chapel, the road curves to the right and you begin to see Ribeira Quente. You can clearly distinguish between the two zones of the village: first you will see the creek and the houses next to it and the seaport; secondly, you will see the Fogo, an area where a pleasant beach is located. Continue for 500 metres until you reach the first houses. Traverse the bridge over the stream and explore the fishing village of Ribeira Quente.

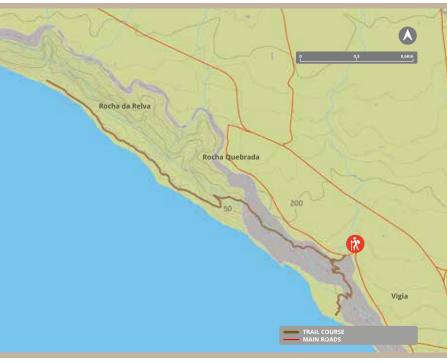
TRAILS OF THE AZORES



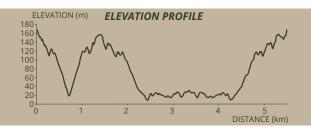
PRC20 SMI

Rocha da Relva

Difficulty: Medium Extension: 5,5 km Time Average: 3:00h Category: Circular







PRC20 SMI Rocha da Relva

This trail leads to Rocha da Relva, a small detrital headland or $faj\tilde{a}$, located on the southwestern coast of the island. Since there is only one pathway to access the $faj\tilde{a}$ you will have to go through it again when returning.



Starting at the regional road, next to Belvedere do Caminho Novo, you will find the first indications on how to get to Rocha da Relva. Use the secondary dirt road that connects to the car park that was recently built for visitors. At the entry of the car park, you should consult the panel, which contains all the information you need before you begin the hike.

At the beginning of the trail that descends to the $faj\tilde{a}$, there is a small sanctuary to remind us of an old tradition of 16th and 17th century, when those that passed here stopped for a pray and left a donation. On your left, you can see the cliff of Rocha do Cascalho with a small flatter zone by the sea. You can get there via a detour that you will find further ahead.

50 metres after having begun the descent, the pathway becomes stonier, a result of the conservation work undertaken by the municipality to improve the security of the access to *fajã*. After some S-curves, you will find the detour to Rocha do Cascalho (1.2 km, round trip), as aforementioned. This detour will lead you to some wineries/cellars, typical hous-

PRC20 SMI Rocha da Relva

es, vineyards circumscribed in the traditional corrals of basaltic stone and to a leisure area by the sea. Return to the principal shortcut, take a left, where *Morella faya*, *Opuntia ficus-indica* and *Arundo donax* predominate in the vegetation. The avifauna also makes its presence felt, notably the endemic birds of the Azores, such as *Turdus merula azorensis* and *Motacilla cinerea patriciae*.

When you get to a panel called "Jogo da Bola", you can enjoy the first view of the $faj\tilde{a}$ of Rocha da Relva. On this phase of the trail, we highlight the geological sequence of different materials that recount the geological story of the different eruptive periods of the surrounding volcanos. The cliff wherein the shortcut is located presents a pattern that varies between basaltic lava flows, which resulted from effusive volcanic events, and pumice, which resulted from explosive volcanic events. Some palaeosols, with a reddish colour, reveal phases of calmness between eruptive events.

You will pass by a plaque that points to "Ladeira do Cardoso", where the shortcut is steeper. Ahead you will find the first rural houses that served as sheds of the farms, where corn, potatoes, tomatoes and grapes are cultivated. You will pass by a small fountain, with a small welcoming message written in a panel of tiles and, after some s-curves, you will reach the $faj\tilde{a}$. This type of $faj\tilde{a}$, of detrital provenance, is very common in São Jorge and have been classified as a $Biosphere\ Reserve$. However, on the island of São Miguel, this is one of a few.



PRC20 SMI Rocha da Relva



Head to the small chapel dated 15th-8-1981. Although there is no one living here due to the lack of electricity, there are a considerable number of cellars and small houses that used by some locals on the weekends and holidays. Do not be surprised if you come across a donkey or a horse since there are animals that used in the transportation of goods along the shortcut.

Take a left and go around the chapel and continue on the shortcut by the sea. Cross the bridge over the stream and observe, on your right, an entry into the cliff, called Rocha Quebrada. After the Baltazar and Lousada houses, you will pass by another fountain. On your right, observe the terraced vineyards separated by small corrals that were built using basaltic stone. After reaching the *Araucaria heterophylla* tree, look at the last houses of Rocha da Fajã, located at the westernmost extremity of the *fajã*. Given that the shortcut ends next to these houses, you will have to take the same pathway to return to the car park. Good climb!

TRAILS OF THE AZORES



PR21 SMI

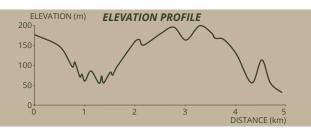
Padrão das Alminhas - Salto da Farinha

Difficulty: Medium Extension: 5 km Time Average: 2:00h Category: Linear









PR21 SMI Padrão das Alminhas - Salto da Farinha

This trail is located between the villages of Achadinha and Salga, in a part of the island where grottos formed by hydric erosion are common. These grottos and stream beds, that became streams of torrential water, reveal rock formations of solidified basaltic lava. The water element is omnipresent throughout this trail.



Upon arriving at the village of Achadinha you will find, at the junction of the regional road and Rua Direita, an information panel next to a circular leisure area with wood benches. At the beginning of this trail, you will come across two important landmarks that invoke the disembarkation of liberal troops, an important historical event that occurred in this village in the 19th century. The military objective of the military campaign was to defeat the last absolutist stronghold in the Azores. The first monument is an obelisk in basaltic rock that honours the military struggles of the liberals whilst the second monument - Padrão das Alminhas - is a homage to the victims of this historical event. It should be noted that Padrão das Alminhas (Pattern of Souls) was made with tiles of the old

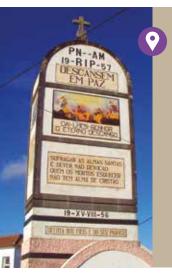
PR21 SMI Padrão das Alminhas - Salto da Farinha

Chapel of São Bento that was located where the church of Nossa Senhora do Rosário, now lies.

Walk down Rua Direita and observe the houses in this village, some dating back to the 19th century. You will certainly notice that in many of the houses' facades there are plaques honouring saints like Saint John and Saint Peter. 200 metres after having initiated your walk, on your left you will find the Culture House João de Melo, the old house that belonged to the parents of the writer and which was converted into a cultural centre by the Municipality of Nordeste. In addition to the cultural and literary events that take place here, you can also look at some historical memorabilia and traditional artefacts.

Continue the descent, 150 metres ahead you will find a sign informing you that you must take a left at the detour in order to get to Pesqueiro, the place where the liberal troops disembarked on the 1st of August 1831, led by Count Vila Flor. Continue walking through the pastures and corn plantations. If you look westward you will see the church of Salga and Ponta da Ajuda. A bit later the descent becomes steeper as you head toward Pesqueiro. When you get to the first "S" curve, leave the asphalt road and take the small shortcut to your left that follows the waterway that once powered the watermill. The shortcut, which proceeds along a basaltic rock formation, in which native species such as *Erica azorica* and *Festuca petrae* grow, will guide you to Risco, a spot where you can observe a small waterfall that resulted from the uneven downstream of this torrential waterway.

When you reach the waterline, cross the stream. Soon thereafter, you will find two information panels regarding two short detours that you can take before continuing on the trail. If you opt to go to a small well



ACHADINHA

At the time of the Portuguese Civil War of 1828-1834, it was in this village that the liberal troops disembarked, led by the Count of Vila Flor, the future Duke of Terceira island, whose troops mounted the historic attack on the last Miguelista stronghold in the Azores (supporter of the legitimacy of the king Miguel I of Portugal). An obelisk in basaltic rock and a monument called Padrão das Almas were erected to honour the victims of this historical event.

Some of the most prominent Portuguese men/women of letters, such as João de Melo and Adelaide Freitas, originated from this village. Paying homage to the writer-novelist João de Melo, the municipality rehabilitated and adapted the old house belonging to his family, turning it into the House of Culture.

PR21 SMI Padrão das Alminhas - Salto da Farinha



on your right, you will be able to see the waterfall from another angle. Later, go up the slope located on the opposite side of this valley. You will come across exemplars of *Arundo donax* and *Pittosporum undulatum* and you will be able to view the valley from a different perspective.

After hiking upward for 500 metres, you will get to a fork where you will find three trail signs. In order to continue on the trail, you should follow the indications of the sign referring to Salto da Farinha. However, if you so wish, you can choose the detour toward Poço Azul (170 metres). If you decide to take the detour, have a good look around and confirm your bearings (call it point A). Go down the improvised staircase and when you get to the next fork in the trail take a left, descending rapidly to Poço Azul, where you can refresh yourself in the pristine water of the pond. The geological cause of the bluish coloration of the pond's water is the high content of copper in the surrounding rocks that originated from volcanic eruptions. Return to the fork before the pond and proceed leftward in the direction of "Ponte do Nosso Senhor", where you can see Poço Azul from a different perspective. Continue on the shortcut that goes around and will guide you back to point A. When you get there, take a left, continuing towards Salto da Farinha.

Take the shortcut that is flanked by some exemplars of *Cryptomeria japonica* until you reach the regional road. Turn right for 15 metres and take a small shortcut that will appear on your left. You are now back on the asphalt road, cross it and proceed to the shortcut ahead that descends throughout the vegetation into a picnic area. You can now make a small detour on your left in order to get to Salto da Farinha, a 40-metre-high waterfall. After taking the detour proceed in the direction of the bathing area where this trail ends.



PRC22 SMI

Grená - Pico do Ferro

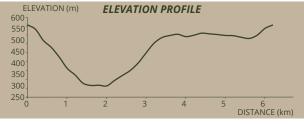
Difficulty: Easy Extension: 6,2 km Time Average: 3:00h Category: Circular





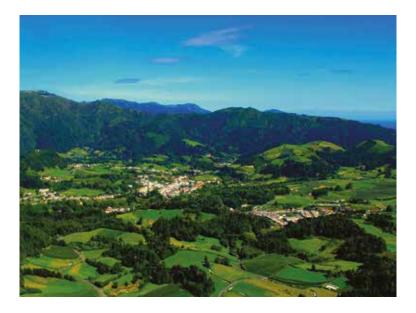






PRC22 SMI Grená - Pico do Ferro

This trail is located in the *Protected Landscape Area* of Furnas and it offers the possibility of visiting the caldera's lagoon and its surrounding terrain, which is a part of the hydrographic basin where the Furnas Hydrographic Basin's Ordering Plan was implemented, notably its Landscape Lab.



This trail begins at the belvedere of Pico do Ferro, one of the most popular belvederes on the island, offering vistas of the Valley of Furnas, with the village on the left, the lagoon ahead, and, on its margins, the zone where the famous *cozido* is cooked in the geysers. When visibility is good it is possible to see the island of Santa Maria on the horizon.

Begin by descending the asphalt road with the valley on your right, leaving behind the panel and the *Cryptomeria japonica* tree. 100 metres ahead, in the curve with a *Platanus acerifolia*, you will find a shortcut on your right which you must take. You will descend an improvised staircase, surrounded by bushes that cover this slope of the Valley of Furnas. We should highlight the exemplars of the endemic flora, such as *Hedera azorica*, *Dryopteris azorica*, *Laurus azorica*, *Picconia azorica*, *Ilex azorica* and the native *Osmunda regalis*.

A bit later, near a pasture, you will find a clearing from which you can view the lagoon. Continue walking on the uneven terrain and, 100 metres ahead, you will begin your steeper descent to the lagoon. Pay attention to the slippery ground. As the altitude decreases the vegetation increases in size and there is a greater prevalence of the introduced flora, such as *Cryptomeria japonica* and *Hedychium gardnerarum*.

PRC22 SMI Grená - Pico do Ferro

As you approach the lagoon, you will notice, on your left, the first geysers, a sign of volcanic activity. When you reach the cobbled stone road, with the lagoon ahead, you will come across some panels with information concerning trail PRC6 SMI Furnas. This is because both trails coincide in the next 800 metres. Turn right and, after passing by the car park, you will reach Caldeiras, a tourist spot where the traditional *cozido* (stew) of Furnas is cooked. The ingredients are placed in a clay pot or a pan and then buried on the land surrounding the geysers for about 6 hours, cooking slowly on the volcanic heat that emanates from the ground.

A few more metres ahead, near the lagoon, you shall find a panel with information regarding the Natural Park and the bird species that can be watched at this place, with their respective identification. If you are a birdwatcher this is an obligatory "hotspot" on the island of São Miguel, since you can look at most of the birds that reside in the Azores as well as some other migrating Nearctic and Palearctic aquatic species, such as *Ardea cinerea* and *Egretta garzetta*.

Go near the lagoon, passing by a leisure area and, as you reach the waterline, cross it by stepping on blocks that were placed there to facilitate the crossing. The dirt road ahead is surrounded by *Cryptomeria japonica*, keep walking for 200 metres until you find new information panels that will inform you about the distance separating to the Landscape Lab (1,1 km) and the end of the trail (4,4 km). At this point, you may also look at a small wooden sculpture which represents the hikers that walk on this part of the island.



FURNAS

Furnas, once morphologically identical to the mountain of Pico, was the site of a volcanic cataclysm that resulted from explosive volcanic eruptions that occurred 30,000 years ago. These eruptions caused the collapse of the crater and the subsequent formation of a large lagoon within it. The geomorphological and hydrological singularity of Caldera of Furnas results from manifestations of secondary volcanism, such as geyser fields and thermal water springs. These geological attributes ensured its classification as a *Landscape Protected Area*.

The combination of its natural and cultural attributes makes Furnas a superb landscape with magnificent vistas, diverse and rich vegetation, various thermal and mineral springs, and the gastronomical delights cooked in geysers, such as the typical Furnas' cozido.

PRC22 SMI Grená - Pico do Ferro



Go up the shortcut on your right and, 400 metres later, you will reach Casa da Grená, and old proprietor's house built in the beginning of the 19th century. In the 1980s, it was used as a holiday house of some members of the government. Nowadays it is derelict and even the old belvedere overlooking the lagoon is covered with *Cryptomeria japonica*. Go up the house's staircase, go around its right side and continue walking until you reach the top of the slope.

If you feel tired when you reach the top of the slope and you wish to shorten the hike, take a right at the signpost indicating Pico do Ferro, and take a shortcut that connects the dirt road to the initial starting point. If you wish to continue and visit the Landscape Laboratory, take a left and pay attention to the signposts on the trail. Soon you will be accompanied by an endemic bird, *Buteo buteo rothschildi*. 500 metres later you will find a wooden bench, conveniently placed so as to you may rest for a few moments whilst enjoying a magnificent view of Lagoa das Furnas. From here onwards the trail enters the Landscape Laboratory, an area of pasture lands where several research projects are being undertaken, such as research on the ecological protection and preservation of the landscape area of the surrounding hydrographic basin. With regard to the rehabilitation of the endemic flora, we highlight such species as the *Viburnum treleasei*, *Laurus azorica*, *Ilex perado ssp. azorica*, *Erica azorica* and *Vaccinium cylindraceum*, among others.

After walking for approximately 1 km in pasture land, take a right into a shortcut amid a forest called the "Enchanted Forest". Next, cross the wooden bridge over the waterline and, in the dirt road, take a left. Cross the new bridge over the stream and walk the last 700 metres of the trail, back to Pico do Ferro.



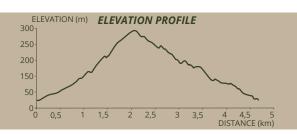
PRC26 SMI

Chá Porto Formoso

Difficulty: Medium Extension: 4,8 km Time Average: 2:00h Category Circular







PRC26 SMI Chá Porto Formoso

This trail is situated in the tea plantation of Porto Formoso, in the municipality of Ribeira Grande. Beginning and ending at the belvedere of Vista dos Barcos, by the port, it enables one to visit one of the two tea plantations that exist on the island.

Go to the centre of the village of Porto Formoso, where you shall find an information panel, next to the Belvedere of Vista dos Barcos, a fitting name since one can clearly see the bay and the port, from which the name of this village is derived. Go east, toward the interior of the village and, approximately 400 metres ahead, take a right onto a narrow-cemented pathway. This shortcut will lead you to a steep hike, amid agricultural land, where you will be able to observe the typical shelters that protect fruit trees from the storms. When you reach a rural road, take a left and continue walking until you find the regional road. Take a left, walk for 20 metres, cross the road carefully and take a right on the steep ascending cemented pathway that is overshadowed by some species of large flora that were introduced by settlers, such as *Pittosporum undulatum*, *Acacia melanoxylon* and *Eucalyptus globulus*.

After traversing the stream known as Grota das Lajes, continue walking up the hill until you find the tea plantation that covers the hillside. Take a right on the next rural road, where you will be at the highest point of the trail at 282 metres of altitude, able to see Ponta Formosa and Ponta do Cintrão as well as some tea plantations. Take a right on the asphalt road and walk down until you reach the Porto Formoso Tea Factory, located next to the regional road. This factory offers its visitors access to panoramic gardens, a tea museum, a tea room and a shop. For a long time, tea was considered an ornamental plant. However, in 1878, the Sociedade Promotora da Agricultura Micaelense brought to São Miguel two Chinese specialists to teach locals the techniques of the industrial transformation of tea. Consequently, interest in tea production increased and reached its zenith during the 19th century and the beginning of the 20th century. Then, with the onset of the First World War and the subsequent tariffs on tea from Mozambique, a crisis emerged and the number of tea factories decreased from 14 to 6 and, in 1966, only two remained. In order to preserve the traditional customs and practices of tea harvesting, an activity called "The Beginning of the Harvest" is organized every year, wherein the practices and customs related to tea production are re-enacted. Those that visit the event are able to witness a very important and rich social and cultural reconstitution of the traditions related to tea production.

After visiting the tea factory, follow the signposts and go down the grazing land, with the tea plantations on your right. 150 metres later, take a left and continue walking on the pasture until you reach local farms where local agricultural products such as yam, orange and bananas are grown. Continue heading south on an agricultural road flanked by a pasture on your left side that will take you to the regional road. When you reach the road, take a right and walk the last few metres in the direction to Belvedere of Vista dos Barcos.



PR27 SMI

Praia da Viola

Difficulty: Easy Extension: 5 km Time Average: 2:00h Category: Linear

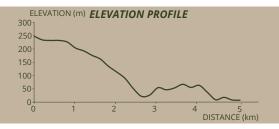












PR27 SMI Praia da Viola

This linear coastal trail, which runs in both directions, links the village of Lomba da Maia to the village of Maia. Since it traverses several waterways, you shall find along the way various structures associated with the human use of hydric resources, such as watermills and water tanks.



Head towards the centre of the village of Maia, more precisely to the vicinity of the Church of Nossa Senhora do Rosário, where you will find an information panel concerning the trail, located at the square Dr. Manuel Sá Couto.

After the initial settlement that occurred in Maia, where disembarking was relatively easy, the population began expanding east, building homes on the edges of the main water streams, where access to water was easier. Consequently, the territory of the village of Maia, in which it was included the village of Lomba da Maia, originally occupied the coastline stretching from Maia to Ribeira da Salga. At the beginning of the 20th century, Lomba da Maia acquired the legal status of a village. Historically, Lomba da Maia played an important role in the production of linen, ceramic tiles and tobacco. Presently the main economic activity is agriculture/farming/milk-production.

Look at a mural painted by local artists and proceed toward the church, passing by the bandstand. After the school, you will find a small monument in honour of an actor that originated in this village, João Soares

PR27 SMI Praia da Viola

Brandão. When he was only eleven years old, he emigrated to Brazil, where he became a popular comedian known as *Brandão o Popularíssimo* (the very popular Brandão)

Follow the road, cross Preto's stream and continue for 400 metres until you find a detour signal on your right, next to an old fountain, directing you to Rua Forno da Telha. After you have passed by the residential area, the trail continues amidst agricultural land. You will then be able to view the surrounding landscape, particularly Ponta do Cintrão and the northwest coast of the island.

After a curve to the right and then another curve to the left the road ends and you will continue walking in a pasture until you reach the top of the hillside. From there you will be able to see the valley and the first ruins of Viola Watermills next to the sea, the place you are heading toward. In the fork ahead, take the upper detour on your right, next to a rural house and a private property on your left, located at a lower level. After a small descent, you will reach the asphalt road, where you will find signposts informing you of the distance to Praia da Viola (0,8 km) and Maia (3,2 km). If you wish to take the detour that connects this trail to the trail of Ribeira Funda - PRC35 SMI Moinhos da Ribeira Funda, you have two options: either you continue on your right, remaining on the road, or you take a left and descend until you find the information panel of trail PRC35 SMI and then taking a right toward the shortcut that will lead you to the connection of the two trails.

To continue hiking the trail that ends in Maia, take a left and descend a cemented pathway that will lead you to the stream bed of Ribeira do Salto. Cross it carefully and look at the first set of watermills, Azenhas da Viola. As you descend the staircase made from volcanic rocks you will notice a small waterfall next to the old watermills.

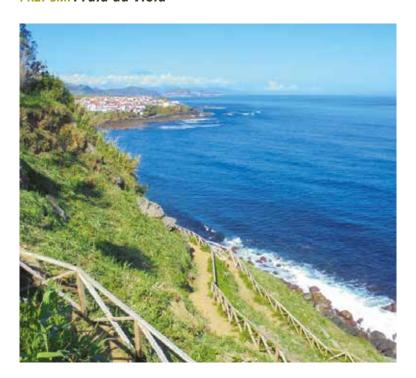
You have arrived at Praia da Viola, a small and quiet beach with thick sand. Walk on the beach for 200 metres and take a left toward a rock



WATERMILLS

The watermills that are aligned and located next to each other were fed by a single interconnecting waterway. Their purpose was the grinding of cereals for the making of flour, the principal ingredient of bread, once the staple of countless families. Each watermill was built in a levelled terrace and in such a manner that the discharge tower was located in an elevated point. These watermills with gable roofs and a window turned towards the sea were built from uncovered rock masonry. Near Praia da Viola, you will find two sites with old watermills, Azenhas da Viola and Azenhas do Nateiro.

PR27 SMI Praia da Viola



staircase that will take you to the second set of watermills in this area, Azenhas do Nateiro. Take a right on the shortcut. Further ahead, you will be able to see the mouth of the water stream on your right, where Ribeira dos Migueis flows in Grota dos Vimes. We highlight here the prismatic disjunction that characterises the surrounding cliffs. After crossing the bridge over Ribeira dos Migueis, go up the shortcut amid *Pittosporum undulatum*, *Arundo donax* e the endogenous *Morella faya*. You might be accompanied by *Buteo buteo rothschildi* on this part of the trail. After a curve on your right, the shortcut becomes smoother and you begin to see the village of Maia in the horizon.

When you get to a small shelter area with some wood benches that enable you to contemplate the scenery, continue on the shortcut on your right that descends the cliff. Halfway on the descent, you should observe the water spring known as Água da Fonte Santa. 250 metres ahead, close to the sea, you will find a large multi-layered water tank that was once used by the local population for washing clothes, as can be seen in the illustrative image next to the water tank.

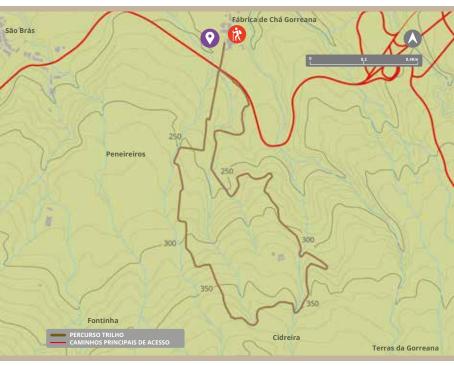
Go up the staircase located on the left side of the tank and turn right on the shortcut, walking the last metres of the trail toward Porto da Maia. During the last segment of this trail, you will find various illustrative images of old rural traditions that are typical of a rural village like Maia.



PRC28 SMI

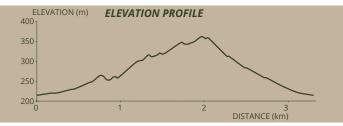
Chá Gorreana

Difficulty: Easy **Extension:** 3,4 km **Time Average:** 1:30h **Category:** Circular



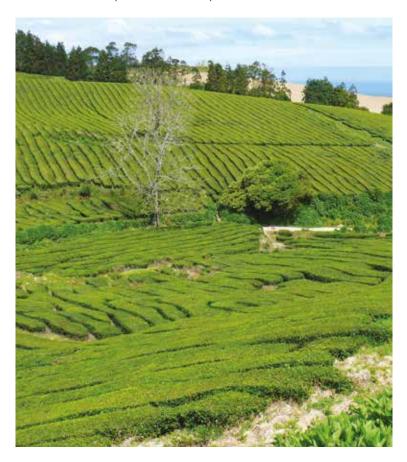






PRC28 SMI Chá Gorreana

This trail is situated at Gorreana tea plantation, on the upper zone of the village of Maia, municipality of Ribeira Grande. Beginning and ending at Gorreana Tea Factory/Fábrica do Chá Gorreana, this trail enables you to visit the oldest tea plantation in Europe.



Go to the Gorreana Tea Factory/Fábrica do Chá Gorreana, where you will find an information panel close to the car park. In the 19th century, with the end of the exportation and cultivation of oranges, an important period in the economic life of the Azores, locals began searching for lucrative alternatives. Hence, around 1820, tea was introduced in the archipelago when Jacinto do Leite brought tea plant seeds from Brazil. Members of the Sociedade Promotora da Agricultura Micaelense started cultivating tea. The zenith of tea production occurred during the 19th century and the beginning of the 20th century. With the onset of the First World War and the subsequent tariffs imposed on tea imported from Mozambique, a crisis emerged and the number of tea factories

PRC28 SMI Chá Gorreana

decreased from 14 to 6. In 1966, only two remained. This tea factory is unique in that it utilizes the water from a nearby stream to produce hydroelectric energy that supplies the factory.

With your back turned to the factory, walk ahead toward the asphalt road. Soon you will find an information panel of a municipal trail. Around you and in front of you, the landscape is dominated by the Gorreana tea plantations, covering an area of 32 hectares, that produce approximately 33 tons of tea per year. A small part of the production is destined to the local market and the rest is exported to continental Portugal, North America, Central Europe, Brazil, Angola and Japan, among other destinations.

When you get to the regional road, cross it carefully and turn left on to the shortcut that goes around the tea plantations on your left, next to the fence. 350 metres ahead, in the dirt road, turn right. In the next junctions always turn left and, after 600 metres, after having walked up the dirt road, you will get to a high point where it is possible to look at the tea plantations and the sinuous terrain.

From here, you will walk up the pathway on one of the hillsides in the valley of Gorreana Stream. In the next few metres the tea plantations will be replaced by a wood in which one finds *Acacia melanoxylon*, *Pittosporum undulatum*, *Morella faya* and *Hydrangea macrophylla*. After crossing the stream, *Cryptomeria japonica* becomes predominant and, when you reach the zone of pasture, tea plants reappear and *Buteo buteo rothschildi*, an endemic bird species of the Azores, makes its presence felt.

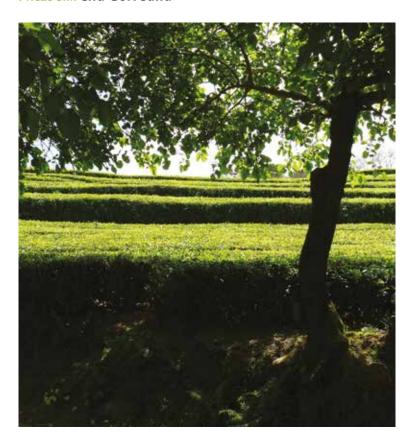
Approximately 250 metres ahead, you will reach the highest point in the trail, located at 370 metres of altitude. Here you will find new tea plantations and some pasture, with red cedars serving as natural protection against the stronger winds. Turn right into the shortcut that continues in the pasture, flanked by a wooden fence and by another grouping of



GORREANA TEA

Since 1883, Gorreana only produces black and green tea. All teas produced here are derived from the variety *Camellia sinensis*, a small tea plant. The humid and mild climate of the Azores is not propitious to the appearance of pests and fungi, making the use of any insecticide or pesticide in the tea plantations unnecessary, thus assuring a 100% organic production. Only natural fertilizers are used, such as vegetable organic manure. Favourable climatic conditions, its clayish soils with acidic pH and rich in minerals, the maritime breeze rich in nutrients, and the manual cultivation methods employed, are some of the reasons that explain why Gorreana is one of the few commercial tea plantations in Europe.

PRC28 SMI Chá Gorreana



Cryptomeria japonica. Later, when you begin your descent toward Gorreana Tea Factory, observe the tea plantations that cover the hillside ahead of you, with the village of São Brás and Ponta Formosa on the horizon.

Take the dirt road and enter the tea plantations, turning left on the next two forks until you approach a wood of *Cryptomeria japonica* that covers a stream that flows to your left. Then turn right and enjoy the last panoramic view over the tea plantations that cover this entire area.

Finally, go down the last metres of the trail until you return to the Tea Factory, where you can visit it, taste one of the teas produced in the plantations you have just visited and/or get to learn a bit more about the production process and the different phases of tea production. The Tea Factory can be visited during the week from 8am until 7pm and, on the weekends, from 9am until 7pm.

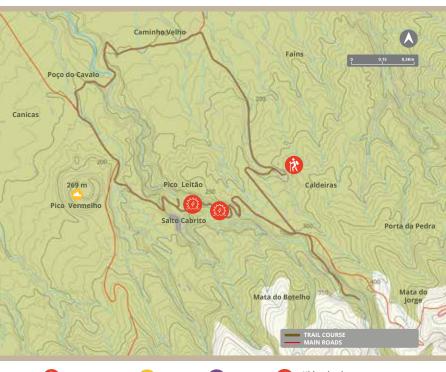


SÃO MTGUEL

PRC29 SMI

Caldeiras da Ribeira Grande - Salto do Cabrito

Difficulty: Easy Extension: 7,5 km Time Average: 2:30h Category: Circular





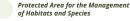


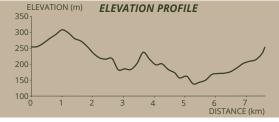




Hidroeletric Power Plant







PRC29 SMI Caldeiras da Ribeira Grande - Salto do Cabrito

This circular trail is situated on the upper part of Ribeira Grande, beginning and ending in Caldeiras, an important geyser field and an area of volcanic degassing related to the volcanic activity of Vulcão do Fogo.



Go to Caldeiras da Ribeira Grande, where you will find the trails' information panel, located near the car park adjacent to the thermal baths, the first of three different types of use of geothermal energy that you will see along the trail. Next, in the caldera with light blue water in continuous ebullition, you will find an 18th-century building of the Thermal Baths of Caldeiras da Ribeira Grande, the oldest thermal baths on the island. Here the water of the spring is heated by geothermal vapour and used in a bath therapy that is known historically as "Crown Baths".

After having enjoyed looking at the architecture of Termas, go down the street, passing by a grand exemplar of the endemic vascular flora, a *Prunus azorica*. When you get to the information panels, walk in the direction of Monte Escuro and Lombadas. A few metres ahead, on your left, you will find the area where *cozidos* (geothermal stews) are cooked, the second type of application of geothermal heat. The Municipality of Ribeira Grande and EDA Renewables constructed nine geothermal caves that are publicly available for cooking the traditional *Cozido das Caldeiras*. These structures capture the vapour that circulates below at 4-5 metres of depth, through fractures that were formed by trachytic

PRC29 SMI Caldeiras da Ribeira Grande - Salto do Cabrito

lava. The vapour is lead to the surface by convection, enabling the cooking of the ingredients that comprise the *Cozido* at a stable temperature of 90-95 degrees Celsius for 6 hours.

Return to the asphalt road and turn left, walking up the road, among pastures, where you will find many signs that alert you to the fact that you are crossing a degassing area. You should avoid staying here for a prolonged period of time. Accompanied by an endemic bird - *Buteo buteo rothschildi*, with the Vulcão do Fogo ahead of you, you will reach a fork where you will turn left and visit the dam, a construction from the beginning of the 20th century intended to be an artificial lake that could store water at night to be used by the turbines during the day. The canal channels the water into a conduit which, in turn, takes it to the turbine of the Hydroelectric Plant, located below, where the falling water is transformed into electric energy. This dam is the first stage of a hydraulic circuit that supplies the Hydroelectric Plant of Fajã Redonda, which you will visit further ahead in the trail.

Go back to the point where you detoured to the dam and continue on the dirt road on your left. 50 metres ahead, walk into the shortcut on your left next to the water conduit, flanked by vegetation. We highlight introduced species such as *Pittosporum undulatum*, *Hedychium gardnerianum* and *Acacia melanoxylon*. You will pass by two improvised wooden staircases that will enable you to cross the conduit. When you reach an area with an agglomeration of *Cryptomeria japonica*, take the shortcut on your right, leaving the conduit behind and keep walking until you find a small gate, next to a rural road. Turn left and walk down the S-shaped dirt road that was moulded by the hills of the valley of Ribeira Grande. When you walk down, do notice the fumaroles that appear in the pumice embankments, revealing the secondary volcanism related to Vulcão do Fogo. As



HYDROELECTRIC POWER IN THE AZORES

In the Azores, all the water that flows in streams is used in the production of hydroelectric energy. Depending on the characteristics of the modes of hydroelectric exploration, such as the pressure and volume of the water flow entering the plant, different turbines may be used, namely; *Pelton, Francis* and *Kaplan* (similar to a boat propeller). Whilst the Hydroelectric Plant of Fajã Redonda worked with three *Francis* turbines, the Hydroelectric Plant of Salto do Cabrito uses *Pelton* turbines. It should be noted that the total of hydroelectric energy produced in the Azores is around 30GW/year, which is approximately the total of the energy produced on the island of São Jorge.

PRC29 SMI Caldeiras da Ribeira Grande - Salto do Cabrito

you approach the stream, the Fajã Redonda Hydroelectric Plant appears before you, the last stage of the hydraulic circuit previously mentioned. The plant stopped operating in 2004 and was replaced by Salto do Cabrito Hydroelectric Plant, which you will visit a bit further ahead. This plant was converted into a museum where you can learn about how hydroelectric energy was produced at the beginning of the 20th century. In the past, all of the equipment was manually activated and monitored.

Cross the metallic bridge over the stream and take the shortcut on the opposite margin, next to the water conduit. A bit further ahead, the stream bed becomes uneven and suddenly you find yourself at a higher altitude in relation to the stream. Here you can observe the embankment of volcanic tuff. Next, go down the stone staircase, which could be slippery, and head to the Salto do Cabrito Hydroelectric Plant, near the water. Built in 2006, this plant was built in a location previously used for hydroelectric purposes and, unlike Fajã Redonda Hydroelectric Plant, the production of electricity is automated and controlled remotely. In this area, you may find some exemplars of endemic avifauna, such as *Columba palumbus azorica*, *Buteo buteo rothschildi* and the bat *Nyctalus azoreum*.

As you can see in the information panel, 50 metres ahead you may visit the Salto do Cabrito. Do not miss the opportunity to appreciate this waterfall with approximately 40 metres, caused by the sudden and accentuated unevenness of the stream bed of the stream which you noticed before descending the stone staircase.

Later, with your back turned to the Salto do Cabrito Hydroelectric Plant, go up the asphalt road that is flanked by *Pittosporum undulatum*, *Acacia melanoxylon* and *Cryptomeria japonica*, and turn left. A bit later you will pass by a reservoir and then descend the pathway on the right that will guide you to the regional road, where you should take a right.

In this phase, you will come across yet another use of geothermal energy, namely, the Geothermal Plants, which produce more than 44% of the total energy produced on the island of São Miguel. Approximately 300 metres ahead turn right on the dirt road and continue walking. After crossing the stream that flows in the valley of Ribeira Grande, turn right at the next rural road you find. Walk for 20 metres and turn left, at the rural road, until it merges with a gobbled stone road, where you will be able to see the information panel that will you inform you of the distance that separates you from the end of the trail (1,2 km).

Turn right and walk up this pathway, flanked first by *Platanus acerifolia* and then by *Hedychium gardnerianum* and *Pittosporum undulatum* until you return to the zone of the Caldeiras da Ribeira Grande.



SÃO MTGUEL

PRC31 SMI

Lomba da Fazenda

Difficulty: Medium Extension: 6 km Time Average: 2:30h Category: Circular

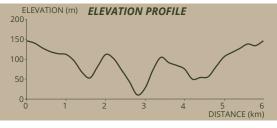






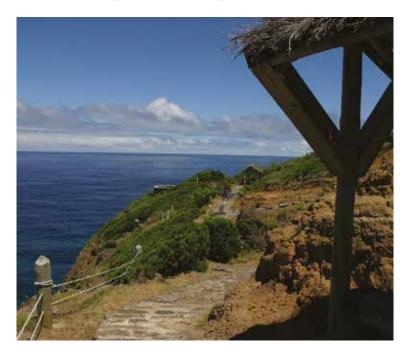






PRC31 SMI Lomba da Fazenda

This trail is located in the village of Lomba da Fazenda municipality of Nordeste. In 1925, two local men decided to detach the village of Lomba da Cruz and Fazenda from the village of São Jorge. The merger of the two detached villages became the village of Lomba da Fazenda.



Head to the centre of the village of Lomba da Fazenda, where the church of Imaculada Conceição stands out, with a small garden and a bandstand in front of it. There you will find the trail's information panel.

Begin by walking down the regional road. 200 metres ahead, turn left into the street Rua Caminho do Concelho, a street flanked by some pastures and farms.

After the first curve, you will cross the bridge over the stream with small orchards on its margins. At the next fork, follow the signpost of Parque das Merendas which will lead you to a descending road that becomes steeper. You soon realize that you are descending one of the hillsides of the valley of Guilherme stream. These valleys, common in this part of the island, were caused by the hydric erosion of the streams that flow from the mountainous region of Tronqueira, which have carved the pumiceous materials into deep valleys. As you descend, you will hear the unmistakable tweets of *Buteo buteo rothschildi*.

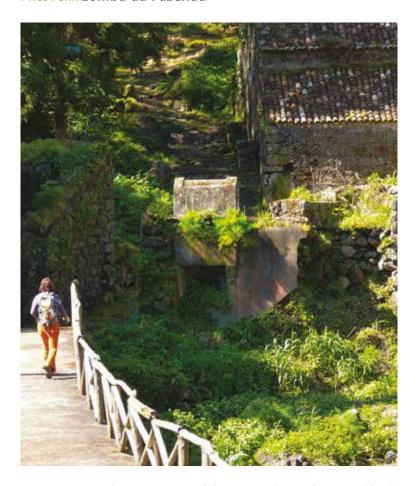
PRC31 SMI Lomba da Fazenda

When you get to Guilherme stream, cross the bridge and take the short-cut, amid the well preserved old watermills, until you reach the asphalt. On your right, you will find a campsite. Turn left and walk up for 300 metres until you reach the belvedere of Guilherme Stream, where you can observe the deep valley that you have just crossed. On your right, by the sea, the pool of Boca da Ribeira. That is where you should go next. After walking down the asphalt, you will reach the car park used by users of the pool. Cross the bridge over the stream and, as you approach the pool, turn left into the shortcut that goes up the hillside. In the first phase of the climb, you will find exemplars of *Tamarix africana* and *Arundo donax*, which is soon supplanted by exemplars of *Erica azorica*. When you reach the top of the hillside, enjoy a panoramic view of the valley and walk straight ahead in the pasture next to the wall. A bit further ahead, at the fork, turn left for 5 metres and continue walking on the dirt road on your right that will guide you to Ponta da Ribeira.

Approach the stream and walk down, toward the coast. When you get near the coast you will notice a hook-like shortcut that goes up the stream. Walk among *Erica azorica* and, some metres ahead, you will find a sign indicating a stream crossing. As you approach a place known as "Parque Endémico do Pelado" (Endemic Park of Pelado), you shall find, on your right, a belvedere made out of a circular stone that will enable



PRC31 SMI Lomba da Fazenda



you to enjoy a relaxing moment whilst contemplating the coastal landscape. From here onwards, the trail continues in a coastal stone pathway with several endemic species, such as *Erica azorica* and *Myrica faya* (presently called *Morella faya*) that are duly signalled with small plaques. If you so wish, you can make a small detour on your right at the next fork that will lead you to the zone of porting, which you viewed from the previous belvedere.

Next, the trail continues in a pasture until the asphalt of Rua do Cemitério. Walk up for 800 metres and, next to a cemetery, turn right into Rua Dr. Vítor Cabral Macedo. When you reach the vicinity of Chapel of Nossa Senhora das Dores, you may opt for a detour on your right that leads to Parque da Morgada, a pleasant leisure area with old stone wash-basins or turn left and complete the trail with a walk around the garden of the village.



SÃO MTGUEI

PRC33 SMI

Atalho dos Vermelhos

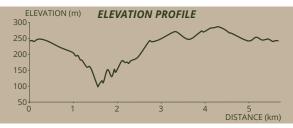
Difficulty: Medium Extension: 5,4 km Time Average: 2:00h Category: Circular







Natural Park of São Miguel Protected Area for the Management of Habitats and Species



PRC33 SMI Atalho dos Vermelhos

This circular trail is situated on the northwest flank of Sete Cidades volcano, near the coast. Although it is set principally in the village of Mosteiros, it begins at the locale of João Bom, in the village of Pilar da Bretanha.



Take the regional road and head to João Bom, more specifically to the junction of Rua do Argentino, where you will find the trails' information panel, next to a small picnic spot. You are in the village of Pilar da Bretanha, so-called due to a small concentration of a small community of settlers from central and northern Europe, namely, Great-Britain and Bretagne (France).

Begin by descending Rua do Argentino. When you reach a square with a mini-market, turn left. At the fork continue walking ahead, passing by an old chapel with a "theatre" of the Holy Spirit next to it. It is a small theatre-like construction dedicated to the worship of the Holy Spirit, generally quadrangular in shape, covered with roof tiles and with an opening at the front. Although "theatres" can be shaped differently, these "theatres" for worshipping the Holy Spirit are omnipresent in all of the islands of the Azores.

PRC33 SMI Atalho dos Vermelhos



Turn right to Rua da Relvinha. You will pass by an interesting wooden structure above the ground which looks like a hen house and, shortly thereafter, by a unit of local tourist accommodation. Further ahead, the residential area ends and a dirt road begins amid pastures. Here you will almost certainly notice the presence of an endemic bird, *Buteo buteo rothschildi*. When you reach the coastal area, in a sharp curve, enter the pasture on the left and continue walking straight ahead until you get to the opposite side, where you will find a shortcut amid the vegetation.

Descend toward a wood of *Pittosporum undulatum* through an improvised staircase, made out of wooden blocks, which leads to Grota do Loural. Right at the beginning of the descent, you will have the opportunity to visit a belvedere on your right that offers magnificent vistas of the highest cliffs of the northern coast of Mosteiros. These cliffs were formed as a result of the alternation of lava flows and projected volcanic materials. These have been exposed to erosion and the oxidization of iron has made the rocks look reddish. In addition to this zone being an integral part of the *Protected Area for Resource Management* of Ponta da Ferraria, Ponta da Bretanha, it is also a part of the *Protected Area for the Management of Habitats and Species* of Ponta da Bretanha, characterized by the existence of countless wooded grottos, such as the one you are crossing. The high cliffs, cut out by maritime erosion, are an important nesting habitat for some sea birds such as the *Calonectris diomedea borealis* and *Puffinus assimilis*.

Continue your descent amid the vegetation. You will find some exemplars of endemic flora, such as *Laurus azorica*, *Erica azorica*, *Picconia azorica* and the *Hypericum foliosum*. When you reach the stream bed, turn right, next to a geological profile where you can clearly see an old pyroclastic flow. For the next 500 metres, the shortcut, a dirt road, goes around the coast passing by some water extraction structures.

PRC33 SMI Atalho dos Vermelhos

After, go up the widest path that moves away from the coast, among exemplars of *Pittosporum undulatum*, *Arundo donax*, the native *Morella faya* and fig-trees, leading you to Rua da Pedra Queimada, which connects to the northern side of the village of Mosteiros.

On your left, you will see Pico da Mafra, a cone of volcanic flows that rises to 361 metres, responsible for the lava spill that originated the fajã on your right, where the Village of Mosteiros was erected. Go up the street amid pasture and agricultural land until you reach a square, at Lomba dos Homens. Turn left into Rua da Casa Velha.

In the initial part of the street, you will observe many materials in the embankments, such as volcanic ash and pumice, that have been deposited by the volcano of Sete Cidades. On your right, you can see the northwestern flank of the volcano crater and its respective ridge. At the next junction that you come across, next to the regional road, walk straight ahead on the secondary road that shall take you to Grota do Lameiro. After crossing the stream bed of this creek, continue walking on a pathway that is flanked by *Cryptomeria japonica*. After a pronounced curve on your left, you reach the residential area once again, recognizing the chapel and the "theatre" of the Holy Spirit. Go forth and turn right into Rua do Argentino, walking the last metres to the picnic spot of João Bom.





PRC34 SMI

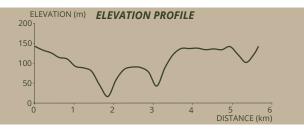
Fenais da Ajuda - Lomba de São Pedro

Difficulty: Medium **Extension:** 5,5 km **Time Average:** 2:30h **Category:** Circular









PRC34 SMI Fenais da Ajuda - Lomba de São Pedro

This trail begins and ends at the centre of the village of Fenais da Ajuda. In a circular manner, this trail connects Fenais da Ajuda to the neighbouring village of Lomba de São Pedro. It offers the possibility of appreciating the natural beauty of the northern coast and the cultural heritage of the interior zones of the villages.



Go to the centre of the village of Fenais da Ajuda, more precisely to the vicinity of the Local Council, where you will find the trail's information panel. The village of Fenais da Ajuda was so called because of the abundance of hay and in honour of the patron saint of the old Franciscan Convent that existed there. The first inhabitants of this village came from Maia, settling here around 1500.

Begin by going down Rua da Nossa Senhora da Ajuda, passing by the primary school and several houses of the village. 200 metres later you will reach a square with an old fountain and a church in front, situated at the back of the rectangular garden, squared in by two rows of *Platanus acerifolia*. We highlight here the bandstand made out of stone, encircled by a small circular water tank, at the entrance of the church.

Turn right and, 200 metres later, next to a water tank, take the agricultural road on your left that goes into some pastures with hedges of *Arundo donax*, corn plantations and some private farmland with fruit tree plantations. This pathway will guide to a small leisure zone with stone

PRC34 SMI Fenais da Ajuda - Lomba de São Pedro

benches. Take advantage of the view over the northwestern coast of the island, especially of Ponta do Cintrão.

Take the path to the right of the leisure area, which descends to the old fishing port, presently inactive. As you reach the old boat ramp, climb the wall on your right, where you can observe an interesting arcade in basaltic stone. Follow the signs that will lead you up the hill amid exemplars of endemic flora such as *Erica azorica*, *Festuca petraea*, and the native *Morella faya*. A bit later, turn left and go up the farmland until you reach an agricultural path. Turn left, you are now in flatter terrain, accompanied by *Buteo buteo rothschildi*. When you get to the asphalt, 100 metres further ahead, you will find a leisure zone and a playground, where you can pause for a bit and appreciate the northeast coast.

Later, go down the cemented steep (25% inclination) path that is flanked by *Platanus acerifolia*, *Erica azorica* and *Hydrangea macrophylla*, whilst observing the valley where Salga stream flows, leading to a waterfall close to the river mouth. After making the first curve on your left, pay attention to the trail's signposts that will lead you into hiking up the slope on your right, amid a wood of *Pittosporum undulatum*. Take the trail near the stream. As a clearing appears, in a pasture, walk straight into a shortcut that will lead to a road. Turn right.

You are now in the village of Lomba de São Pedro. The old place of Fenais da Ajuda became a parish in 1980. Its name is derived from its geo-

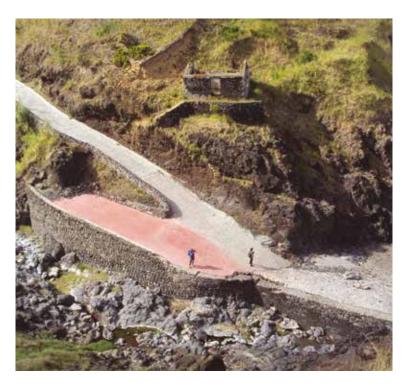


PRC34 SMI Fenais da Ajuda - Lomba de São Pedro

graphical disposition and from its patron, Saint Peter. It is situated on a hill top between two ravines.

At the next fork, take the Rua da Igreja, walking toward Rocha Belvedere. On this street, you will find several old fountains, one of which from 1899, built out of stone, painted in white, except the basin and other decorative elements in masonry. A bit further ahead, in the vicinity of the bandstand, the Church of São Pedro. In its main facade, you can clearly distinguish the decorative keys, an allusion to Saint Peter, to whom Jesus Christ handed the "Keys to Heaven."

Cross the bridge over the stream and walk up the steep path until you find a reservoir. Then, take the pathway on your left. A few metres later, the pathway becomes a lane that will lead you to a wood mostly comprised of *Morella faya*, *Pittosporum undulatum* and *Acacia melanoxylon*. When you get to Quinta da Ladeira, walk down its right side toward the stream bed. Cross the bridge and continue walking on the opposite slope, amid *Cryptomeria japonica*. 200 metres later a clearing appears, enabling you to see, to your right, of the church of Fenais da Ajuda. Continue walking straight for the last few metres of the trail, back to the original point of departure.





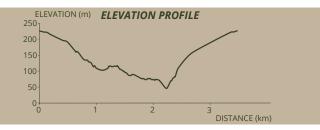
PRC35 SMI

Moinhos da Ribeira Funda

Difficulty: Medium Extension: 3,3 km Time Average: 2:00h Category: Circular







PRC35 SMI Moinhos da Ribeira Funda

This small circular trail is situated on the northern coast of the island, in the locality of Ribeira Funda, parish of Fenais da Ajuda. It is an opportunity to know more about the valuable cultural heritage of the watermills, that exist in this part of the island.



Go to the vicinity of Lomba da Maia, where you will find the information panel indicating a detour to the centre of Ribeira Funda. When you get to the Rua da Igreja, you will find on your left side the information panel of the trail, and, on your right, the Chapel of Nossa Senhora dos Aflitos. The chapel was built in the 20th century (1904), a simple construction, with a bell tower slightly removed from the more prominent facade, made out of masonry painted in white, except its carvings, cornices, corner mouldings, pinnacles and other uncovered decorative elements, also made out of stone. The main building and the adjacent chapel are covered by a gable roof in traditional half-moon roof tiles.

After viewing the Chapel, go down Rua da Igreja, amid the houses and, 150 metres ahead, when the residential area ends, you can see the rural landscape ahead with the valley of Vaqueiro's stream on your right and,

PRC35 SMI Moinhos da Ribeira Funda

on your left, Ponta do Cintrão in the distance, by the sea.

200 metres past the last houses, enter in the pasture ahead, turning left, taking the well-marked shortcut, next to the Arundo donax canes. As you approach the vegetation that covers the slope of the valley of Ribeira Funda, you will find a descending S-shaped shortcut. Here, the predominant flora was introduced by settlers, such as Pittosporum undulatum, Hedychium gardnerianum and Cryptomeria japonica. Do not be surprised if you come across a Columba palumbus azorica whilst descending. These woods are its favourite habitat. It is an important avifauna species because it disperses the endemic flora of the Azores via endozoochory. Soon you will get to the place where you will find the first set of watermills - Moinhos do Crim. Make a small circular turn around the information panel that indicates the location of the watermills, walking towards the stream where you will be able to see a small waterfall. Despite the fact that the construction is now in ruins, you can still discern the original architectural structure of these watermills. Return to the signpost indicating the detour to Moinhos do Crim and continue walking left. Stay on the shortcut next to the stream. 300 metres ahead. you will pass by a flow of water and, a bit later, a new s-shaped descent, amid exemplars or Arundo donax canes, heading to the second set of watermills. Although these watermills are currently abandoned, they are much better preserved than the ones previously seen, as it is possible to discern, it is still possible to discern some typical characteristics, such as the stone work, the gobble roof, a window facing the sea and a conduit. A bit further ahead you will find the third and last set of watermills in this trail, built on one of the margins of the stream. We should note that, if you so choose, you can take a detour on your left that will guide you to trail PR27 SMI Praia da Viola, also known for its various sets of old watermills. We soon realise that these watermills are a part of a



PRC35 SMI Moinhos da Ribeira Funda

vaster network on this part of the island, designed to use the water that flows in the deep valleys in the transformation of the cereal grains into flour that was used to make bread, a staple of innumerable families.

Head straight ahead in the direction of Rocha Padre do Norte, continue walking on the shortcut along the right side of the stream and observing the drops that cause small waterfalls.

As you approach the cliff, you can observe the northern coastline with the embankment of Praia da Viola straight ahead and Ponta da Maia on the backdrop. Continue walking on the carved staircase to your right. On this phase of the trail, we strongly recommend extra caution, given the proximity of the cliff. A bit later you will find a gate and, soon thereafter, the shortcut will lead you away from the coast, going around the slope on your left. If you look east you will see Ponta dos Fenais da Ajuda, where another circular pedestrian trail is located - PRC34 SMI Fenais da Ajuda - Lomba de São Pedro.

When you reach the reservoir, walk straight ahead into a rural path. Approximately 500 metres later, you will again find the pasture where you took the first detour of this trail. Walk up to the Chapel, the final point of this small circular trail.





PRC36 SMI

Pedra Queimada - Lajinha - Degredo

Difficulty: Medium Extension: 6,6 km Time Average: 2:30h Category: Circular

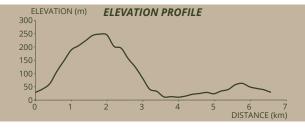












PRC36 SMI Pedra Queimada - Lajinha - Degredo

This circular trail is located in Maia, municipality of Ribeira Grande. After ascending to Lajinha, the upper part of the village, the trail goes through a lavic headland, the *fajã*, where the village of Maia is located.



When you get to the village of Maia, take the road of São Sebastião and walk into the vicinity of Largo de Santo António, where you shall find the trail's information panel next to the bus stop. Commence by walking in the direction of Largo de Santo António, turn right into a small shortcut amid the house that goes up between orchards. After walking up for 300 metres, you will pass by a small reservoir and the shortcut turns right, flanked by *Arundo donax*, *Pittosporum undulatum* and *Morella faya*. Do not be surprised if you see *Buteo buteo rothschildi* in the vicinity. After going up a small improvised staircase, the shortcut turns left and a clearing appears on your right, opening the view to Ponta Formosa and Ponta do Cintrão. 200 metres ahead, the shortcut leads to a margin of the stream and *Cryptomeria japonica* becomes predominant. Next, cross the wooden bridge over the stream and continue walking up.

A new clearing opens, in a zone of pasture and corn. Do not cross the wooden bridge. Continue walking on the shortcut on the left, keeping the stream to your right, until you reach the regional road.

Turn left and continue walking on the shortcut that follows the roads' edge. 400 metres ahead turn left at the staircase and continue walking on the shortcut of Lajinha that goes down the valley near the stream, with the small village of Lombinha da Maia on your right. In this zone of the trail, you will have the opportunity to observe the lavic headland (*fajā*) where the village of Maia rests and most of the western coast of the island.

PRC36 SMI Pedra Queimada - Lajinha - Degredo

After you reach the bottom of the valley previously observed, cross the stream and go down the shortcut with the steepest inclination until you get to asphalt. You will find an old fountain called "Fonte da Ponte". Turn left into Rua do Rosário, where you will find Church of Divino Espírito Sant, built in the 18th-century. Before Casa da Música, turn right into a small square, located between a school and a small garden with a bandstand. Turn left and continue walking in the direction of Porto da Maia, where you will find a swimming area with a bar, an ideal place for a brief pause. You will certainly notice an information panel of another pedestrian trail, "PRC27 SMI Praia da Viola", which connects to Lomba da Maia.

Follow the signposts in the village until you reach the coast again, where you will have the opportunity of contemplating the landscape, at Melo Nunes Belvedere. From here onward you will be hiking along the northernmost coastal area of the village, so called Ponta da Maia, an integral part of the *Protected Landscape Area of Ponta do Cintrão - Ponta da Maia*. For this reason, the rocky cliffs you are going to hike are important nesting areas for some species of marine birds, such as *Calonectris diomedea* borealis and *Puffinus assimilis*.

When you get to the end of the road, continue walking straight in the coastal shortcut that continues amid *Arundo donax* and wooden fences. After moving away from the coast so as to be able to cross the stream with the help of a small wooden bridge, you will return to the coastal shortcut. A bit later you shall have the possibility of naming a small detour on your right, toward the natural pools.

After this detour, walk for 300 metres until you reach the regional road, where the bridge over Ribeira da Cruz is located. It is a fully rounded arched bridge, built in the beginning of the 20th-century. Continue walking to your left, completing the last 900 metres that will lead you back to the Largo de Santo António, to where you began the trail. During this



MAIA

Located on the northern coast of the island of São Miguel, Maia is one of the oldest parishes of the municipality of Ribeira Grande. Its principal residential area was constructed on top of a lavic headland (fajā) that was originated 10 000 years ago. It owes its name to a noble woman, Inês da Maia, who settled here at the end of the 15th-century.

The village prospered in a very short period of time, due to its fertile land, productive port and several industries of considerable importance to the local economy, such as tobacco factories, tea plantations and the production of cement blocks.

PRC36 SMI Pedra Queimada - Lajinha - Degredo



last segment of the trail, as you walk the street of São Sebastião, you will find two important historical landmarks The Old Tobacco Factory and the Solar do Lalém.

The Old Tobacco Factory was in operation from 1871 until 1988. It was recently converted into a museum and it can be visited every day of the week, except Sundays and national holidays. The factory comprises eight buildings. On the right side of the road, there are two buildings beside the road, with furnaces, and a third, perpendicular to the road, where unprocessed tobacco was stored. On the left side, one finds the office building, the storage for the finished product and the building where the cigarettes were made. There are also vestiges of driers, parallel to the road, made out of wooden structures covered with undulated metallic sheets.

Solar de Lalém is a residence of aristocrats that was adapted for rural tourism. It has been rehabilitated and remodelled several times throughout its three centuries of existence but the oldest building, a chapel dedicated to São Sebastião, built in 1687, has retained its original facade. The Solar and its gate were erected in 1742. The original building resulted from an architectonic rehabilitation and reconstruction that took place in 1850. Presently it is a landscaped area, consisting of a Solar with a chapel, adjoining houses, gardens and agricultural land.



SÃO

PRC37 SMI

Rota da Água - Janela do Inferno

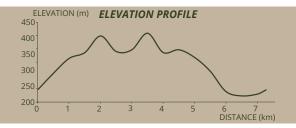
Difficulty: Easy Extension: 7,6 km Time Average: : 2:30h Category: Circular











PRC37 SMI Rota da Água - Janela do Inferno

This trail is situated in the upper part of the municipality of Lagoa and has the particularity of crossing several tunnels. You should be equipped with a flashlight before going through a tunnel.



Begin this trail at the picnic park of Remédios, where you will find some benches and stone tables. Follow the indications on the information plaque with the inscription "Janela do Inferno" (Hell's Window). Walk up the road leading to Lagoa do Fogo and, 50 metres ahead, turn left and continue walking on asphalt toward the place of Remédios da Lagoa.

When you get to the junction, turn right and walk up the uneven Caminho do Mato. After passing by the last house, turn left into an agricultural road and, at the next junction, before continuing to the right, take this chance to enjoy the view of the southern coast of the island, especially of Lagoa and Ponta Delgada.

Once more, you will reach the road that connects to Lagoa do Fogo. Cross it carefully and continue walking ahead, on a rural road, amid pasture. In the embankments, you may observe some volcanic materials such as pyroclastic deposits or pumice, typical residues of explosive eruptions that originated in the Volcanic Massif ahead of you, known as Água de Pau Volcano or Fogo Vulcano. Approximately 1 km

PRC37 SMI Rota da Água - Janela do Inferno

later, leave this rural road, turning right into an agricultural road with a transit sign prohibiting the circulation of all vehicles, except those belonging to local farmers.

At the next fork, turn right, southward, with Pico da Mariana on your right side. 200 metres later, turn left and, as you reach a pasture, you will see, straight ahead, the first tunnel of this trail, Tunel da Grota. Enter the tunnel carefully and walk 50 metres until you reach its exit. It should be noted that this rectilinear tunnel was built with stone arches. At the exit of the tunnel, you will discover a different landscape, comprising large exemplars of Cryptomeria japonica, Morella faya and Pittosporum undulatum. Take the shortcut on your left. As you walk you become aware of the existence of water conduits on the ground. You are now arriving at Valado Velho, where there are several aqueducts that channel the abundant water on this hillside of Vulcão do Fogo to Lagoa and part of Ponta Delgada. When you get to a signpost indicating a right turn, descend the staircase and cross the stream. Before continuing your hike, look back and observe the arched stone that enabled you to cross the stream, the first of many that you shall find along this trail since the construction of elevated water conduits was the preferred method for transposing the two streams that flow in this valley.

Take the shortcut along the stream, in a zone where the valley is at its highest. When you get close to an exemplar of *Cyathea cooperi*, turn right and cross the stream at the next arched stone. After crossing to the other margin, turn left and take the same detour (200 metres) to *Janela do Inferno*, an erosional cave that resulted from the combination of the erosive action of water from the stream with the different levels of resistance and fracturing of the surrounding rocks. This cave is situated on a rock formation rising 14 metres in height, formed by the superposition of trachytic lava flows. In the past, the water of the springs at *Janela do*



AQUEDUTOS DO VALADO VELHO (VALADO VELHO AQUEDUCTS)

Due to the abundance of water on the southern side of the Fogo Volcano, different types of aqueducts were built to channel water to Lagoa and part of Ponta Delgada. Hence, at Valado Velho, in Remédios da Lagoa, you will find stone arches that are 8 metres high, thus enabling the transportation of water over geographical obstacles or gaps as well as tunnels to facilitate the passage of water to the ground level. We highlight two types of tunnels: firstly, a tunnel on rounded stone arches, with a length of 49 metres; secondly, a tunnel carved in ignimbrite rock, with a length of 72 metres, facilitating the passage of water to the ground level.

PRC37 SMI Rota da Água - Janela do Inferno

Inferno was channelled to the Lagoa Alcohol Factory, which was in operation from 1882 until 1969.

You are now back at the point where you made the detour to Janela do Inferno, follow the small tunnel and continue on the shortcut that follows the stream. Further ahead, walk down to the stream, using an improvised staircase made out of wood logs so as to facilitate adherence to the pumice stone. After crossing the stream, a clearing appears. Continue walking airtight ahead, crossing a new tunnel, small in size. Later you will pass beneath an arched stone and soon the trail ascends to higher ground in relation to the stream, which runs on your left.

At the next fork, turn right and enter the last and longest tunnel. Do not worry if you do not immediately see the exit on the opposite end of the tunnel. A curve at the very beginning of the tunnel is blocking the view of the exit on the other side. Be careful when you get halfway into the tunnel because there the height of the tunnel in relation to the ground is lowest.

When you exit the tunnel, continue walking straight ahead in the pasture, turning left. Cross the gate and turn left, walking for about 20 metres until you reach a reservoir. Turn right into the agricultural road and, when you find a fork, follow the signposts that will lead you to vegetation on your left, the spot where you will cross the stream, resorting to a staircase made with wood logs.

From here onward, walk south in the agricultural road that will merge into the secondary road that leads to Água do Pau. Turn right and walk the last metres of the trail, until you reach the picnic area of Remédios.

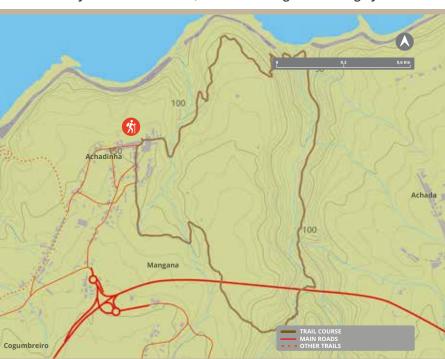




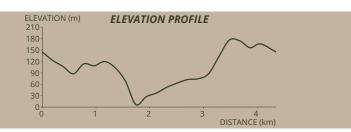
PRC38 SMI

Lomba d'El Rei

Difficulty: Medium Extension: 4,5 km Time Average: 2:00h Category: Circular







PRC38 SMI Lomba d'El Rei

This trail is located in the village of Achadinha, municipality of Nordeste, beginning and ending at Church of Nossa Senhora do Rosário. It offers access to heritage sites related to hydric resources, such as old watermills and fountains.



When you get to the village of Achadinha, walk on Rua da Mangana or Rua Direita, toward the Igreja da Nossa Senhora do Rosário, where you shall find the trail's information panel at the entrance of the adjoining car park.

Lomba da Achadinha was established in the last guarter of the 15th-century. Its first chapel, a tribute to Nossa Senhora do Rosário (Our Lady of the Rosary), was inaugurated in 1529 at the place where the Parish church now stands. Of the various moments in its construction, we highlight: the building of the sacristy, the main chapel and the bell tower in the 18th-century; the substitution of the altar image of its original patron saint by Nossa Senhora do Rosário; the reconstruction of the church after an earthquake that occurred in the middle of the 18th-century and a rehabilitation that abided by the architectonic principles of Society of Jesus in Rome, evinced by the placement of pillars and spiralling stone cornices; and a substantive rehabilitation undertaken at the end of the 18th-century which raised the building through the placement of rocks from the derelict chapel of São Bento (Saint Benedict) in its foundation and, finally, the enlargement of its walls so as to make the building more solid. Construction work ended in 1882, a date that is inscribed above the front church door.

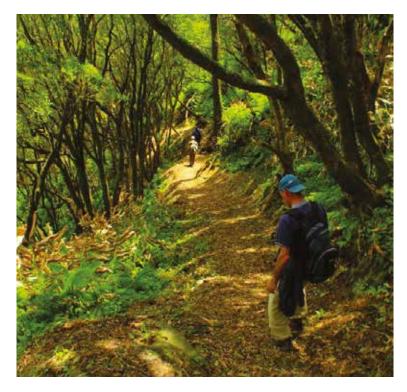
Take the asphalt road on the left of the church. After walking for 100 metres, with the valley ahead of you, go down Caminho do Concelho,

PRC38 SMI Lomba d'El Rei

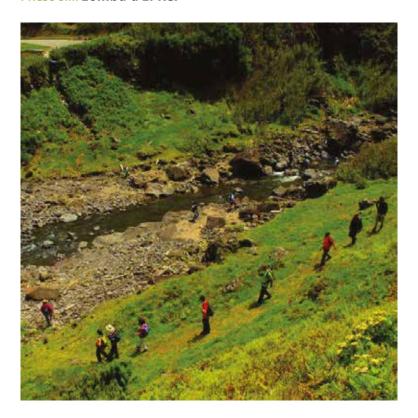
which connects this village to the neighbouring village of Achada. When you get to the riverbed, turn left into the first shortcut, along with the stream. In addition to the concentration of *Arundo donax*, you will notice the presence of some endemic species, such as *Erica azorica* and *Picconia azorica*. In the surroundings, *Buteo buteo rothschildi* is making his presence felt. After walking for 300 metres on this trail, turn right and go up an improvised staircase that leads in the direction of the hillside of Moio de Baixo. A bit further ahead, a clearing opens a westward view of Ponta da Ajuda. Turn left at the next fork.

After going around the hillside, follow the detour on your left that descends the opposite side of Lomba do Rei in an s-shaped manner, among exemplars of *Pittosporum undulatum*, toward the bed of the stream of Caldeirões. Halfway in the descent, you will find an old fountain. As you get near the stream's bed, cross it and walk up the cement staircase, flanked by *Tamarix africana*, *Plantago coronopus* and the endemic *Festuca petraea*. Turn right and go up the path, with the stream on your right side.

After passing by the STOP sign, walk straight ahead for 200 metres and, in the following curve, turn right into a dirt road that will lead you to



PRC38 SMI Lomba d'El Rei



the place where the streams of Lenho and Caldeirões converge. Here, at the base of one of the highest bridges of Euroscut, a recently built motorway that leads to Nordeste, you can appreciate the ruins of an old watermill. Turn left and go around it.

A bit further ahead, near a small waterfall, cross the wooden bridge over the stream and walk up the shortcut amid *Pittosporum undulatum, Cryptomeria japonica, Osmunda regalis* and *Hedychium gardnerarum.* You will be lead to a pasture. Continue walking and, 100 metres ahead, turn right onto the asphalt road and cross the bridge over Euroscut.

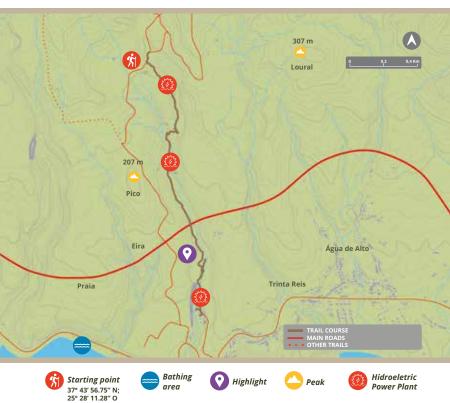
Continue walking on the secondary road until you find a detour on your left, with some exemplars of *Acacia melanoxylon* at its entrance, descending to the stream, with some adjacent reservoirs that were once used by the local population for washing clothes. With the village of Achadinha in the background, walk straight ahead and, 200 metres later, turn right, next to the haystack. Remain in the agricultural road until you reach a square, with a small leisure area. Walk down Rua da Formosa, passing by some restaurants, until you again reach Church of Nossa Senhora do Rosário.

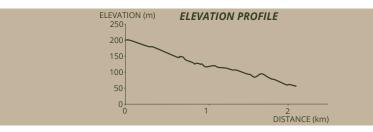


PR39 SMI

Quatro Fábricas da Luz

Difficulty: Easy Extension: 2,1 km Time Average: 1:30h Category: Linear





PR39 SMI Quatro Fábricas da Luz

This small and linear trail is situated along the basin of Ribeira da Praia, on the southern flank of the Volcanic Massif of Fogo. It was here that in 1897 the generation of commercial hydric energy and the provision of public and private lighting in the island of São Miguel was started by engineer José Cordeiro (1867-1908).



The trail begins in the upper area of the village of Água de Alto, more specifically in the Scouts Park of Lagos, in the vicinity of the water reservoir of Pico da Praia. This park was created by the local representation of the national scouting movement and was conceived for recreational and educational activities, serving twice as the stage of the Azorean Jamboree, an event that mobilises hundreds of youngsters.

After reading the trail's information panel that is situated in the car parking area, proceed south and cross the gate next to the water stream. A bit further ahead, you will find a reservoir that once supplied Fábrica da Cidade (1904-1974). Presently it supplies the Little Hydric Power Plant of Ribeira da Praia, which was built in 1990 and started producing energy in 1991.

Take the road on the left side of the reservoir, descending toward the old Fábrica da Cidade, where you will see the ruins of two buildings that once were a part of the factory. It was the second hydric power plant built in Ribeira da Praia and it was in operation from 1904 until 1974. Its original purpose was to complement the already successful Fábrica da Vila (built four years before) and assure the supply of electricity to the city of Ponta Delgada. The ruins remind us of the past. We should note that in the adjoining house, where labourers slept, we can see vestiges of an old fireplace. In the hydric plant, we can see old

PR39 SMI Quatro Fábricas da Luz

equipment such as hydraulic turbines, alternators and a conduit. Since the buildings are derelict and therefore perilous, visiting the interior of the plant is forbidden.

Continue heading south, passing by a detour to the stream on your left, where you will be able to see the old charging chamber of Fábrica da Vila. Back on the main road, you will quickly encounter a fork. You should take a left and walk until you reach the base of one the waterfalls of Ribeira da Praia. At this point, you will find the ruins of the oldest hydric energy plant in the island - Fábrica da Vila (1900-1972), a plant that supplied electricity for both public and private lighting in Vila Franca do Campo. It was his plant that started hydroelectric energy production in the Azores, the first of four hydric plants built in Ribeira da Praia, a favourable spot from a hydrological and orographic point of view, given the existence of three successive waterfalls.

Follow the signs along the stream and head into a wooded area composed mostly of species introduced by settlers, such as *Pittosporum undulatum* and *Acacia melanoxylon*. When you reach a cultivated area, descend again to the riverbed where you will enjoy a dive in Cascata do Segredo, located on your left, or Poço dos 30 Reis, on your right.

Next, take the pathway that is flanked by an old conduit, until you reach Praia, a place with some houses. Next, to the fountain, take a right and head toward the old Fábrica da Praia that was in operation from 1911 until 1974 but was later converted into the Museum of Electricity. Here you will find some reproductions of historical documents, photos of those that pioneered the exploration of hydric energy in the island and a luminous panel with a technical blueprint of the plant, among other artefacts of interest. To see the hydric plants that are presently in operation it is advisable to contact EDA Group – EDA Renewables in advance and schedule a visit (eda@eda.pt / 00351 296 202 000).



RIBEIRA DA PRAIA

The stream descends 2000 metres from an elevation of 200 metres with three successive waterfalls. These favourable geographical factors explain why Engineer José Cordeiro decided to construct here the first Hydro-Electric Unit in the Azores, known as Fábrica da Vila (1900-1972). Other hydroelectric units were later built next to the waterfalls, such as Fábrica da Cidade (1904-1974), Fábrica da Praia (1911-1974) presently the Electricity Museum - and Fábrica Nova (1927-present).





PRC1 TER

Mistérios Negros

Difficulty: Hard Extension: 5,5 km Time Average: 2:30h Category: Circular



PRC1 TER Mistérios Negros

This hike begins at the *Caminho Florestal do Pico Gaspar*, next to a house that was built with the purpose of recreating the typical rustic house representative of the Terceira Island, with details like the typical "mãos-postas" (clasped hands) chimney. This house was erected by the *Os Montanheiros Association* for the tourists to explore the *Gruta do Natal*, a cave whose entrance is inside this house that serves as a reception for the visitors.



Two steps away from the house, the panel indicating the starting point of the hike will provide you with all the information you need concerning the characteristics of this nature trail. The small lagoon, whose water level is very low after each summer, is known as the *Lagoa do Negro*. Despite having been neglected over the years, it is still of some relevance for the avifauna, namely the migratory birds. Interestingly enough, one of the (non-visitable) stretches of the *Gruta do Natal* passes underneath this lagoon.

Shortly after you begin your walk, turn right on the first curve that leads to a red lapilli path and cover it until you reach a pasture. You must enter and walk in straight line towards the opposite side, where you will find a shortcut to more natural sceneries. Along with the cryptomerias, which were planted here some years ago without the clearing of the land, other species withstand in the lower strata: the Azorean heaths (*Erica azorica*), the common heathers (*Calluna vulgaris*), some Azores junipers, and many other plants that are rebuilding the natural community that used to exist here. You can hear the short and strident singing of the *Regulus regulus inermis*. Then, pass next to a marsh that is transformed into one of the lakes of the *Vale Fundo* in the winter and in the spring. But, for now, rushes cover the landscape.

Keep walking along this well signposted trail until it splits in two: first, turn right to visit the only one of the three lakes in the *Vale Fundo* filled with water all year round. These wet areas, all of which with free water in the winter, are important for migratory birds that arrive here by accident, namely some

PRC1 TER Mistérios Negros

ducks and herons. Very few people miss the opportunity to photograph this lake, which, albeit modest in size, is appealing due to what surrounds it.

After this worthwhile detour, return to the main trail and keep walking. You will soon skirt a marsh that turns into the last of the lakes during the winter and the spring. Then, you will cover an area filled with *Calluna vulgaris*, another area with several acacias, a number of curves, until you finally reach the middle lava dome of the *Mistérios Negros*. Prepare yourself for the hardest stretch of the trail, which requires extra caution and some additional physical effort and agility. But nothing is impossible.

From the eruptive focuses rise three colonizing black lava domes that you can contemplate. A few minutes later you will have crossed this very uneven and sharp-edged trachytic lava between small ravines and under a forest that still did not manage to spread beyond the low parts of the lava domes. We are in the *protected area* of the Terceira Island Natural Park.

Before you know it, you have reached a penetration path that you must follow. You have 700 metres more to cover. As you go forward, the land-scape reveals itself more and more. To your left, you will see the green mantle that surrounds the black lava islands, while pre-historic eruption cones start to appear: the *Picos Gordos*, covered in cryptomerias. Behind them are the elevations of the island's central massif, and, to the right, is the Pico Gaspar. The view over the lava domes that stretch below you and over the surrounding landscape is truly beautiful.

In this steeper stretch, the path is quite slippery and unsuitable for vehicles. In the more potholed and irregular stretches of the path, it is common to see some generally thin crusts — about 5 millimetres thick —, hardened and impermeable, formed by a vitreous reddish-brown material. The placic horizons, name given to blade-like strata, occur due to the precipitation of iron and other chemical elements, and are commonly seen in volcanic soil.

After one of the last curves in this path, turn left, as indicated by the trail sign, taking a shortcut between the trees where some logs were placed on the muddy ground and over which you must walk. Also, fences were installed in other places so as to prevent you from stepping on more



MISTÉRIOS NEGROS ERUPTION

According to historical accounts, "Massive earthquakes began to be felt on the 22nd of November, and continued occurring very frequently until the 14th of April 1761, when the earth shook more than ever; and it continued shaking with short breaks until the 17th day of the that same month, when, in the morning, there was an eruption behind the Picos Gordos, with underground booms that sounded like discharges of artillery."

PRC1 TER Mistérios Negros

swamped soil. You will cross a gate that opens to one of the pastures in this *Pico da Cancela*. When reaching the top, you will cross another gate and take a footpath that leads to the triangulation station. Facing west you will see one of the most typical agricultural landscapes in the high regions of the interior of the island: pastures permanently separated by hedges of cryptomerias. To the left, the peninsula of Monte Brasil appears in the landscape. Next to the sea is the S. Mateus da Calheta church. The way it stands out from the village is such that it used to serve as a reference for the fishermen of this parish to identify their fishing spots.

Leave the triangulation station behind and enter the woods once again. Pay attention to the tree trunks so that you do not get lost. Soon after you will enter a pasture with a magnificent view over the Pico Gaspar, its crater and the surrounding landscape. Keep going forward along the highest area of this pasture and enter the next one, after which you must leave, taking the old path that led to the lands at the top of this peak. The descent is made in the shade, between slopes covered with mosses and ferns. When you reach the end of the stretch, go along a "corridor" with barbed wire on both sides and pretty soon you are back on the asphalt road.

Turn left and walk a few dozens of metres along the path until you are invited to start climbing the Pico Gaspar, a truncated volcano with a beautiful crater and very rich in terms of endemic species. The surrounding landscape shows several other cones (and two small pit caves) in line with this one. This succession of eruptions is set on the called *Terceira Rift*: a tectonic structure that is approximately 550 kilometres long and originates from the Mid-Atlantic Ridge that crosses the islands of Graciosa and Terceira (very significant in this Pico Gaspar alignment), ending at the intersection with the Azores-Gibraltar Transform Fault, which separates the Eurasian and African plates.

Get back to the road and turn right, always walking along the asphalt until you reach the starting point. On your left are the uneven pastures that once were a lava field that resulted from fissure eruptions that left several marks, namely some volcanic cavities. Located in the middle of these semi-natural pastures, few metres below you, is the Algar/Gruta do Mistério, a volcanic cave with a 151 meters long lava tube. Your eyes will certainly lay on the small volcanic cone with some low trees where the approximately 12 metres high pit cave that allows you to enter the cave is set.

Once the hike ends, we recommend a visit to the Gruta do Natal. It is an approximately 700 metres long lava tube, and a large part of it, wide and easy to walk in, is open to the public. As you go deeper, you will be able to see branching tunnels, superimposed passages, and several geological details and structures. It is famous among the locals for the religious ceremonies that take place there: baptisms, weddings and the traditional Christmas Mass. It is the ideal additional activity to end this nature trail characterised by its strong geological nature.



PR2 TER

Baías da Agualva

Difficulty: Easy Extension: 4 km Time Average: 2:00h Category: Linear



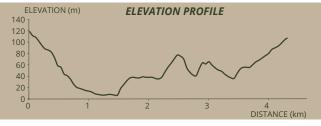






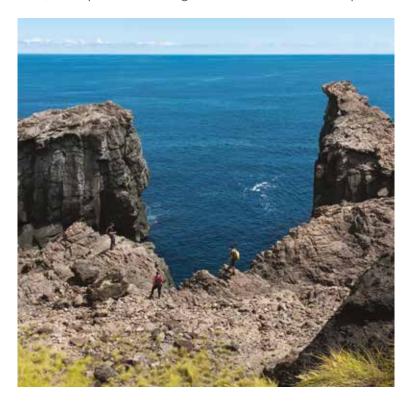






PR2 TER Baías da Agualva

This hiking trail stretches along the island's north coast, between Agualva and Quatro Ribeiras. It starts where the old Canada da Alagoa intersects with the regional road and covers a dirt path that crosses farming lands, where pastures and forage corn stand out in the landscape.



We go down approximately 500 metres towards a very deep gorge whose air remains fresh thanks to the *Pittosporum undulatum* forest on each side. In the past, this was the only approach way to the $faj\tilde{a}$. Here used to fall a significant part of the water that filled the alagoa. Already at the end of the gorge, we cover an area with springs, whose water also used to run towards the lagoon but is now channelled to the lift station that you see on your left when entering the $faj\tilde{a}$. Here the water is pumped until it reaches the regional road, after which is used for domestic consumption.

Keep walking along that path and turn right immediately after, towards the ocean. We start hearing the rocks rolling, pushed by the waves, forming a natural dike responsible for the protection of the inside area of the $faj\tilde{a}$, thus enabling the farm work to be made. The cultivated lands are filled with uncommon crops, such as yams. Walk along the left side of the $faj\tilde{a}$ until you reach the pebble beach. Go up the slope to your left,

PR2 TER Baías da Agualva

sparsely covered with *Erica azorica*, along a path that leads to the *fajã*'s viewpoint. This viewpoint is located on recent lavas that now replace the disappeared bay, which existed prior to the *fajã*, when the sea waves struck the surrounding cliffs. From here you have a privileged view over the ocean and all the neighbouring landscape.

Leave the viewpoint through a path built over the rocks that will lead you to a passable road. But, before getting there, turn right to a small square where fishermen often park their cars so they can go fishing on the high rocky outcrops in front of you. In this viewpoint overlooking the *Baía da Ferradura* you will be provided with the opportunity to see the steep rocks, carved by the natural rock separation that creates what appears to be a kind of large cobbled street at sea level. This whole coastline is part of the *Protected Area for the Management of Habitats or Species from the Quarto Ribeiras Coast*.

In order to go back, keep walking on this road, after which you must go up the asphalt one until you reach a sharp curve. Here you will enter a footpath that crossed these lavas in a location that used to be covered with vineyards but is now abandoned. A brief stop here and there allows you to see the birds that fly and rest here. In the summer, one can lay eyes on a significant colony of common terns that come to visit the rock doves, a species that inhabits this region all year round.

Close to the end of the hike, this footpath curves to the right and does down towards a meadow located in a place where you can see the deep *Baía das Pombas* that has a cave with the same name. In case you walk a little bit further towards the ocean, you will see a dangerous trail used by fishermen to reach another fishing spot. This place, characterised by interesting nooks, requires extra caution as we walk towards the cliff.

Turn around and go up the slope to your right. Cross an often fern-covered portion of land and keep walking next to the walls that separate the pastures on your left. To your right is the coastal cliff with a spectacular view over the bay and the headlands that penetrate the ocean. After a while, you start catching the first glimpses of the Ponta do Mistério, and, soon after, you will find yourself next to the Caldeirão Grande — a small bay from whose deep waters rise remarkable basalt walls, forming



ALAGOA DA FAJÃZINHA

This fajã is one of the best examples of an azorean lava flow fajã. As a result of a lava spillage that passed over the cliff and created a barrier, a bay was formed where the seawater used to flow freely. Later, the bay was filled with detritus dragged by the water through the gorge leading into it and by the sea that "fitted" the rock, creating a pebble beach.

PR2 TER Baías da Agualva

two promontories that seem to want to enclose it. Keep going up until you reach the flat area on your left, covered with tufts of *Festuca petraea*, and head towards the edge. In front of you is the Ponta do Mistério, where the sea usually breaks on the rocks, creating many pools filled with marine fauna and flora. If you want to, feel free to cover the fishermen shortcuts located on the Caldeirão Grande towards the northern area of the Ponta do Mistério. The tide pools full of white and green seaweeds, blood-red sea urchins, small fish, some limpets and other molluscs, are part of the life that can be seen. Even though this detour is not part of the official signposted trail, because it is not recommended for less physically prepared people, you will find that it is worth making the additional effort. Do not forget to go up the path you covered on your way down.

Once you find yourself on the plateau once again, turn your back on the sea and move forward, going up the fishermen footpath. On its final stretch, taller trees on both sides will provide a pleasant shade. You will emerge on the Canada da Baleeira, which you must go up until you reach the regional road. 1,3 kilometres of road separate you from the starting point of this hike.





PRC3 TER

Serreta

Difficulty: Medium Extension: 7 km Time Average: 2:30h Category: Circular



PRC3 TER Serreta

Head north along the regional road and, approximately 600 metres past the Serreta church, you will see the entrance for the Canada das Fontes to your right, marked with an imposing sign indicating a walking trail.



You must go up another 600 metres stretch until you reach the starting point of the walking trail, where you will find an information panel. During the climb, you see signs on the electricity poles indicating that you are on the right direction. If you drove here, park your vehicle in this spot, because this hiking trail begins and ends in this location.

The first stage of the hike consists of a constant climb until you reach the Lagoinha. A hiking stick may be useful during the steeper and more slippery climbs and descents. Start by going up a few metres along the asphalt road to your right. If it's neither cloudy nor foggy, look back towards the ocean and you will be able to see clearly the São Jorge island and the Pico's mountain behind it. When you reach the first fork, turn left, entering an old path of dirt and rocks, among which are obsidians and pumices: an important stretch that must be remembered, for the pumice is the only floating rock and the obsidian is the only semi-precious rock in the Azores, very used in the local jewellery.

This is a high-altitude pasture area that resulted from the late clearing of the land, part of which using machines. Dividing the plots are species like the *Laurus azorica*, the *Erica azorica* and the *Juniperus brevifolia*, along with the omnipresent *cryptomerias*.

New fork: turn right and then left, almost immediately after. Go up a little bit more and prepare to turn left, entering a path that is flatter than the one that brought you here, and will only be covered on your way back from the *Lagoinha*. The woods that were cleared a few years

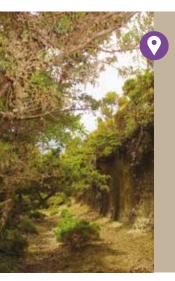
PRC3 TER Serreta

ago are now filled with invasive species. The path will soon give place to a footpath that crosses acacia, eucalyptus and cryptomeria thickets, and you will not be able to see the sun for a few minutes, because the footpath is covered by the arched roof of *Pittosporum undulatum*. On the wet dirt soil, between the mossy rocky outcrops, grow about ten different species of ferns and a few strange mushrooms. This is an extremely uneven footpath, set lower than the surrounding ground, probably cut through by the passage of humans and animals as well as by erosive factors. As we walk, the climb becomes steeper and the vegetation is increasingly filled with more natural species.

The footpath becomes easier to cover and, as you will be able to see on your left, a stream dug and small valley filled with big ferns, mostly *Woodwardia radicans* that grow over the fence built for the safety of the hiker. The path, whose sides are yellowed by *Sphagnum sp.*, crosses a currently dry small tributary and enters a wood of imposing *Cryptomeria japonica*. Somewhat unexpectedly, we find some *Angelica lignescens* and *Sanicula azorica* along the way.

The footpath becomes steep once again, with the roots emerging from the ground. Further ahead, the acacia leaves replace the roots, spread all over the place. You will see *Vaccinium cylindraceum*, *Myrsine africana* and the *Viburnum treleasei* with satiny berry clusters. We pass next to a small *Chamaecyparis lawsoniana* wood with the unmistakable smell that emanates from the squamiform leaves that grow in small flat branches.

You emerge on a path that a few metres later turns left to an asphalt road that comes from the Mata da Serreta recreational park. Turn right and keep walking until you reach the end of this road. A new signalled climb, with steps formed by small trunks, leads you to an irregular high relief terrain that resulted from water erosion.



PUMICE / OBSIDIAN

The Serreta parish is located on the western side of the Serra de Santa Bárbara. This geological massif of trachytic origin created the western third of the island formed vast lavas and huge pumice deposits, which, after being thrown to the atmosphere, covered the lavas, occasionally forming several metres high strata, like the ones seen at the slopes of the Ribeira do Além, which you will cover at the final stage of this walking trail. The fast thrust of the lavas from the eruptive focuses and the resulting thermal shock in the atmosphere sometimes originates a very quick cooling of the lava, vitrifying it and creating the obsidian (volcanic glass) — a sharp-edged black stone that can be seen in different stretches of this hiking trail or mixed with the pumice on the slopes.

PRC3 TER Serreta

You reach a dirt path, where only off-road vehicles can pass. Turn right. Each side of this stretch is filled with *llex perado ssp. azorica, Laurus azorica, Tolpis azorica, Potentilla erecta, Lysimachia azorica, Woodwardia radicans, Osmunda regalis, Lycopodiella,* and many other species, creating the perfect example of a mountain flora community.

After covering several metres, you will see a sign indicating the climb to the top of the Pico da Lagoinha, which rose in the slope of the Serra de Santa Bárbara. The climb is made along a shortcut that is subject to strong erosion from the water that runs through it in the winter, and where there should be steps. Some trunks placed along the path, as well as some steps cut on the ground, try to solve the problems of the slippery surface and the unevenness that have to be overcome in this climb. However, despite these obstacles, it takes about ten minutes.

You will find a fork close to the top: turn left and keep walking until you reach the crest. Once you are there, enter this perfect crater and go down a short distance towards a small viewpoint from where you will see the Lagoinha da Serreta, with its clear waters. It is small, but of great beauty, due to its geological surrounding and its location on the mountain's slope. The richness of its lacunal ecosystem makes it of great importance for wild life, namely for migratory birds. You are in the *Protected Area for the Management of Habitats or Species from the Central Plateau and Northwest Coast.* The shortcut leads you to a triangulation station, but on your way there you will find another viewpoint overlooking the lagoon. When you reach the station, look towards the ocean and you will see the lava spillage that separates the villages of Serreta and Raminho. Using two of this station's vertexes as a reference, you might be able to see clearly the Graciosa Island.

Return to the path and go left. You will cross some streams (tributaries from the Lapa Stream) along a trail of red lapilli. Soon after, you will find a sign indicating that you must enter a pasture to your right, through a "posts corridor", using the grooves resulting from the passage of vehicles as guides. 100 metres later, you must turn left and go up the slope that separates the pasture from the natural vegetation. For the next few minutes, you will have to do down, always on the edge of one of the sides of the ravined Ribeira de Além. Here and there, where Arceuthobium azoricum grow over the Azores junipers (Juniperus brevifolia), small vegetation windows open, offering the opportunity to contemplate the deep valley, worn away by time and by water until it meets a rocky mantle that slowed down the process. It is quite an impressive landscape. The shortcut next to the steep slope ends as you get close to the Pico Negrão, where the path that awaits you gets even steeper, providing an incredible experience in which the ground is constantly slipping under your feet. Halfway through this slope, a viewpoint appears, allowing you to see the Ribeira do Além valley from above.

Once the slope ends, you must enter the pasture in front of you and go down towards a water tank, where you will cover the path that will lead you to where you have already been. You will most certainly recognise the way that you now have to cover in the opposite direction so as to to get back to your vehicle.



PRC4 TER

Monte Brasil

Difficulty: Easy Extension: 7,5 km Time Average: 2:30h Category: Circular













Natural Park of Terceira



PRC4 TER Monte Brasil

This hike is a journey through history. A history seen in the 17th century structures spread throughout the landscape, built for military defence. The fortress, the large ramparts, the gunpowder magazines, the sentry boxes, and several other things, all built from stone extracted from the Monte Brasil itself.

This hike starts at the isthmus that links this peninsula to the rest of the island, next to the entrance for the Relvão, the main recreational park in the island. Go up towards the Portão dos Carros. The road that leads to the Monte Brasil and the Garrison Regiment number 1 — quartered inside the mountain's walled perimeter — is adorned with leafy plane trees that offer us a refreshing shade. Before you reach the gate, on your right you will see the ditches at the bottom of the wall in a succession of squares — called "wolf caves" —, which made it harder for the invading enemies to place their ladders. You pass the Portão dos Carros, once used for carriages and oxcarts, and now blocked by two wooden doors placed on both sides of the large wall.

Go left towards the forest park and the recreational area. The Angra bay reveals itself at each step. Below this straight asphalt road, a minaret-like powder magazine with its four towers was built a few centuries ago. Here, as well as in several other places, artillery was fired towards São Sebastião Fortress (commonly known as Castelinho) right in front, and fired back, so as to make it impossible for the enemy boats to anchor in the bay.

Then, a curve to the right, followed by a curve to the left, after which you must go along the narrowest path on your left that will lead you to the *Chapel of Santo António da Grota*, built in 1615 by the Spanish governor Gonçalo de Mexia. Past the chapel, take the dirt path.

A drinking water tap, three green doors and two wooden benches: here's what you will find at the bottom of a steep path to your right that you must ignore. Go up the next one, 350 steps later. It is a wide path, where you will occasionally see big trees. Pay attention to the sign that indicates you must turn left, leaving this path and entering a slippery shortcut, with the roots of the trees serving as steps here and there.

You reach the playground and picnic area. Keep walking to the left, going up until you see a building with a sign indicating it is a toilet. Once you reach the asphalt road, turn left: in front of you are two dirt roads that go up, and, if you look closely, there is also a shortcut in the middle of both. Take the one on the left, and later you will go down the middle shortcut. Next stage: Pico do Facho. The *Erica azorica*, the *Laurus azorica*, the *Morella faya*, the *Pittosporum undulatum* and the *Lantana camara* are some of the species you will see in abundance. At the top, you will find a square that was created due to the number of paths that converge here. Now, only a staircase separates you from the 205 metres high Pico do Facho. This watchtower, meant to spot approaching boats, was built somewhere between 1567 and 1588, during the early days of the settlement. With improvements introduced over the years, it was always used to serve the original purpose of — by using flags and bal-

PRC4 TER Monte Brasil

loons — communicating the number, the origin and the kind of boat that approached the island. Until it was closed, after which it started to be called Semaphoric *Post*.

Here we can see a lookout house made of stone and whitewash, with a ridge roof and a vaulted ceiling, a window on one side and a low-relief cross on the other, where the provisions and the equipment needed for the sentinel to do his work were stored; a 1951 triangulation station; the torch, where a stick was attached to a support structure and the signals were hoisted and waved; two round-niche-shaped air-raid shelters from World War II; a few water reservoirs and other destroyed structures.

Keep walking forward along the shortcut that will lead you down towards the sign indicating the maintenance trail you must take. It is a nice trail, filled with vegetation, which you will have to cover for an approximately one-kilometre stretch, and where you will see some training equipment. Wind along the slope until you finally reach an exit that consists of steps made of small tree trunks, and dug on the ground further ahead, that lead you down the valley formed by the Pico do Facho and the *Pico da Quebrada*, until you are close to the Caldera. Once you are at the bottom, take the shortcut that stretches towards the sea. You will then reach the *Ouebrada Fortress*.

The Castilians built this simple fortress in order to prevent unwelcome boats from sheltering in this slope of the Monte Brasil, which until that date had no protection. Erected on the top of steep rocks more than 40 metres high and inaccessible from the ocean, it consisted of a small



MONTE BRASIL

It is considered the largest coastal volcano in the Azores, with a one square kilometre area, approximately. This type of eruption usually occurs in lowdepth waters, starting with an explosive hydrovolcanic activity that results from the interaction between the basic magma and the sea. It forms large dark steam columns and volcanic ashes that, once settled, solidify in the form of tuffs. More recent than the island, this eruption took place in a time when the area where Angra is located was already covered with vegetation. Whenever excavations are made, it is common to find in the tuffs fossilized marks of leaves of plants that existed back then, mainly bay and ivy leaves. After the cone was formed, the erosion of the edge of this volcano created four elevations that surround its crater, always allowing the Monte Brasil to take different shapes, according to the point from where those who see it from a distance contemplate it.

PRC4 TER Monte Brasil

fortress with a lookout house and an attached cistern, of which you can only see traces. Go back to the shortcut and keep walking around this caldera located 45 metres above the sea and once turned into a shooting range and a bullring. It is now quieter. The only agitation comes from the wind that shapes the vegetation on the slopes. The shortcut stretches along the inside slope of the Pico da Quebrada until you reach a road. Follow it to a fork, where you must turn left towards the top of that peak, also called Pico da Vigia. A bunker-like building used in whaling housed the spotter who, when seeing a whale, sent a signal to the men ready to embark on the whalers. A firecracker was usually used for that purpose.

Return to the path and go down until you find yourself once again next to a cement wall, painted white, where you can see the ocean in the direction where Brazil is. A trail in front of you will lead you to the Pico do Zimbreiro, which you can climb, even though it is not part of the signalled hiking trail. You will see no juniper trees here, and although it is perfectly possible than they once grew in this region, I cannot say for sure that is the case.

Go down until you see the asphalt, next the *caldera* 's viewpoint. About 20 metres before you enter the main road, you will see a bare rock on the opposite side: one of the old quarries located in the Monte Brasil. The black tuffs on the carved side are quite solid, which explains the reduced erosion of the walls and other human-built structures as well as the existence of outcrops that do not turn into soil.

Go up the asphalt road, walk past the open-air fitness and recreation circuit to your right, and keep going a few metres more until you find a shortcut between sentry boxes, on your left: it leads to a picnic, barbecue and toilet area. Next to it is another 17th century building with barred windows, used to store gunpowder.

A sign indicates the climb to the Pico das Cruzinhas, but on your way up you will see shelters from the anti-aircraft artillery battery, installed here during World War II and where true museum pieces are on exhibition.

The Pico das Cruzinhas, the lowest of the four elevations, with 168 metres of altitude, but with an impressive view over the city classified as World Heritage Site by UNESCO and over the island's south coast, is undoubtedly the most visited viewpoint of the Terceira Island. In old geographical maps, one could see three crosses that time made disappear. Perhaps they had something to do with the gallows of the castle that apparently existed here. In its place was erected a stone pillar in the year 1932 — a high column topped by the Order of Christ Cross, evocative of the 500th year since the discovery of the Azores.

Go down the stairs, turn left, walk along the path and turn left on the first crossroads, towards the playground, taking the next shortcut and covering it until you emerge once again on the main road. Now all you have to do is walk back to the starting point of this walking trail.



PR5 TER

Fortes de São Sebastião

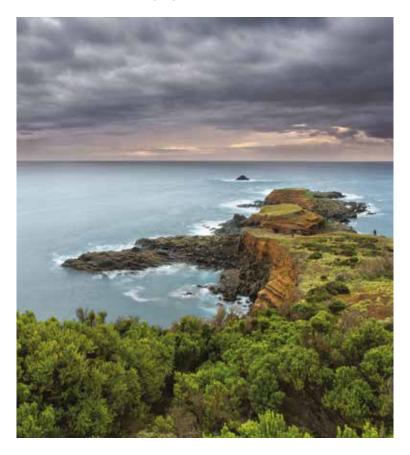
Difficulty: Easy Extension: 5,7 km Time Average: 2:30h Category: Linear





PR5 TER Fortes de São Sebastião

The hike begins at the Ponta das Contendas and covers part of the island's southeastern coastal region, ending in the centre of the village of São Sebastião, next to the mother church. The different bays and inlets, as well as the ruins of old coastal fortresses (from the 16th and 17th centuries), are some of the highlights.



Head towards the Baía das Mós, 400 metres east from the Contendas' Lighthouse, where you will find an information panel by the side of the road. Don't be surprised if you find some surfers in this location, since the Contendas is one of the best surfing hotspots in the island.

Enter the first footpath to the left side of the panel, flanked by *Tamarix africana* and endemic species like the *Erica azorica* and the *Morella faya*. When you reach the first fork, turn right until you reach a promontory. From there you will see the Contendas' Lighthouse and the Cabras islets in front of you, and, in the opposite direction, you will be able to see the

PR5 TER Fortes de São Sebastião

Baía das Mós, with the picturesque parish of Porto Martins behind the Contendas islets. To the left of the islets, you have the Pico dos Cernos, where the next stage of the hike will be covered. As for the geological highlights, there is something recurrent along this hike: the viewing in profile of the eruptive history of the place, seen for instance in the drained lava (softer eruptions), the pyroclastic rocks (more violent eruptions) and the paleosols, indicative of the volcanic activity interruption.

Past this promontory, go right and walk along the shortcut that will lead you to the Ponta das Contendas, an area with no vegetation (due to the high salinity levels that results from the sea spray) and geologically interesting, since it is possible to see basaltic flagstones and rocks that were once basaltic lavas that drained towards the sea. Next, turn left and walk until you find the ruins of the old Forte da Greta. This fortress is one of three that existed in this location to protect this bay. This coastal defence of the island, with the construction of several fortresses, dates back to the mid-16th century and its purpose was to face the attacks from pirates and corsairs. Almost immediately after, in the shortcut back to the road, you will be able to see, next to the pebbles to your right, the ruins of another old fortress, called Forte de Santa Catarina das Mós, which is destroyed.

When you reach the road, turn right and cover 600 metres, enjoying *Erica azorica* and *Morella faya* specimens, as well as old vineyards with their respective support structures and geologic profiles, used by the University of the Azores in field classes within the context of the Geology subject, where the aforementioned volcanic episodes are examined. Immediately after the curve that initiates the climb towards the Maria Vieira Chapel, you will find a lane to your right that you must take.

Keep walking along the lane flanked by giant canes (Arundo donax) and tamarisks (Tamarix africana). Then, once in the pasture, you can make a



BAÍA DAS MÓS

In the context of the Portuguese succession crisis of 1580, the Azores declared for António, Prior of Crato, thus becoming the main resistance centre to the union with Castile. So, in a first attempt to break the resistance, and given the geostrategic importance of the archipelago, Philip II of Spain sent a military expedition in 1581, defeated in the famous Battle of Salga. Two years later, a new and more powerful military expedition led by Álvaro de Bazán was sent. It disembarked at the Baía das Mós, the stage for the intense battle that was won by the Spanish. It is important to mention that this battle is solemnly celebrated at the Escorial battle room, in Madrid.

PR5 TER Fortes de São Sebastião

small detour to the right, going down towards the vicinity of the three Contendas islets: Feno, Garajau and Mina, where the third fortress of this bay is located: the Forte do Bom Jesus (Good Jesus Fortress), which is in an advanced state of deterioration. The endemic species *Festuca petrae* and *Plantago coronopus* dominate this area close to the fortress.

After visiting this fortress and seeing the Baía das Mós and the Contendas islets, go back to the Pico dos Cernos, where there is an entrance between the *Erica azorica* and the *Morella faya* that leads to the top of this peak. On the upper part of the peak, the *Pittosporum undulatum* and the fern *Pteridium aquilinum* replace the previously mentioned species.

Enter a pasture that will lead to the highest point of this hike — approximately 100 metres of altitude — where you will find a triangulation station. From this viewpoint, you can see the other bays that are part of this hike, as well as previously seen landscapes, but from a different angle.

Go down the pasture along the right side, while enjoying the view of the huge rocky cliff of the Pico dos Cernos, with the Contendas islets stretching southward. Once you reach the *Tamarix Africana* specimens, go down the following pasture and turn left to a lane that will lead you to the Pico do Manezinho. This peak, predominantly covered with endemic species like the *Erica azorica*, the *Morella faya* and the *Festuca petraea*, consists of a natural viewpoint overlooking the surrounding rural land-scape, as well as the bays that outline this southeastern coastal region.

The trail stretches through pastures that will lead to the Forte do Pesqueiro dos Meninos, the last fortress in this hike, which is kept in better repair because of its restoration during the Second World War. Close to this fortress is a bathing area with the same name, used by locals during the summer.

Then, follow the lane that crosses the pastures until you reach a recently restored mill built in honour of Francisco Drummond, located at the Ribeira do Frei Ioão. You are at the Arrabalde. Go up the street with the same name and follow the sign that indicates how to reach the centre of the village. As soon as you start covering the street, look to your right and you will be able to see the Chapel of Senhora da Graça, one of the oldest chapels in the island, which dates back the early days of the settlement. When you reach the next crossroads, turn left, cover the Largo da Fonte — very important over the years for the functioning of the Arrabalde's watermills — and take the Rua da Igreja that you lead you to the centre of the village of São Sebastião, where the square and the mother church were erected and where the hike ends. It is important to mention that the São Sebastião church was built by the first settlers in the island, around 1455, and is characterised by late Gothic architectural details and a Manueline portal. Inside the church, you can see several late medieval frescos — the only ones in the Azores — that date back to the first half of the 16th century.



PRC6 TER

Rocha do Chambre

Difficulty: Medium Extension: 9,3 km Time Average: 2:30h Category: Circular



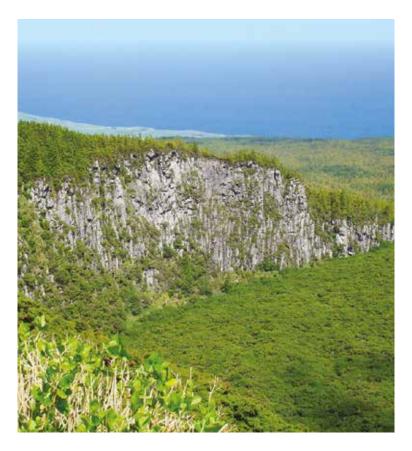




Natural Reserve

PRC6 TER Rocha do Chambre

The walking trail begins next to the regional road that links the city of Angra, in the south of the island, to the parish of Biscoitos, in the northern region. Actually, the whole hike is made within this parish's boundaries, whose name is inspired on the recent lava mantles that covered its terrain.



As soon as the hike begins along a red lapilli path, you will see on both sides the typical green mantle that covers the lava flow that ran here in 1761. It consists mostly of low woods of *Erica azorica*, *Morella faya*, *Juniperus brevifolia*, *Laurus azorica*, *Myrsine africana* and some invasive species like the *Pittosporum undulatum*.

You will see a fork to your left, but ignore it and keep going straight forward, making a sharp turn to the right in this path that serves the pastures of Malha Grande. After covering an approximately 250 metres distance, you will reach a fork, where you must turn left, knowing that you will cover the path to the right on your way back.

About 200 metres ahead, you leave the red lapilli path and enter a shortcut next to the last wooden gate. The lava that spread over the older arable lands created a trail of scoriasceous rock whose stones now divide the pastures. It is an approximately 650 metres long shortcut, uncomfortable to walk on, requiring from you extreme caution when placing your feet on the loose and sharp-edged stones. On your right, the pastures stretch up the Juncal, the elevation that precedes the top of the Rocha do Chambre, which is your destination in this hiking trail. On your left, to the West, is the volcanic massif of the Serra de Santa Bárbara, a more recent part of the island where its highest point is located.

On your right, you will see a new path that meets the one you are covering now. Take it and go along towards a gate made of small trunks and pallets. Past that gate, walk about 5m metres towards a thicket of very thick *Cryptomeria japonica* that grow in a depression where water falls and a rivulet runs. The sign tell you to go around that "depression" heading left so as to avoid the wet areas formed at the bottom of the trunks after heavy rainfalls. However, if the ground is dry, you can go up that rivulet until you find a bridge, crossing it to the right and continuing the hike. This is, without a doubt, the most pleasurable option, for it allows you to walk next to the tree trunks, some of which with rather unusual shapes.

After crossing the bridge, you will enter an old shortcut that goes up along the right bank of this stream, under the roof created by the



ROCHA DO CHAMBRE

It consists of what is left of the west edge after the last great trachytic eruption in this island occurred, in a period when other three massifs were already formed: Cinco Picos, Guilherme Moniz and Santa Bárbara. It is known as Pico Alto Massif because it is the highest elevation within its boundaries. To have an idea of the original crater's size, if you turn East, you will see the opposite edge 2800 metres away. In the meantime, other eruptions occurred inside it, creating countless lava domes and lava torrents, like that of the Biscoito Rachado, with its clearly noticeable thick drained lavas in the landscape in front of you that filled a significant part of this crater with lava: the lower levelled area that stretches under your feet, called the Biscoito da Ferraria. Behind the Biscoito Rachado is the highest point in this part of the island: the Pico Alto, with 809 metres of altitude. It is estimated that the eruption on the Pico Alto occurred approximately 100 000 years ago.

woods. You walk a few metres along pastures and, past two gates very close to one another, you enter the woods once again. While you go up this shortcut of stones, trunks and roots, you will hear the sound of small waterfalls and see some ferns and mosses through the foliage that has fallen from the trees, and that is just about it. You will cross another bridge and see that the trees in the slopes somewhat resemble walking sticks turned upside down. The shortcut ends and, immediately after, you can finally cross the stream and enter a pasture you must cover. Once you reach the end of the pasture, you must walk along a footpath in order to enter the path on the opposite side.

Walk up this damaged secondary road for 170 metres, until you reach its end. Keep going forward, penetrating the woods, and crossing it until you reach one of the *Azinhal's stream* tributaries, walking along the right bank in between the trees, where you see very little marks or signs indicating that someone has been here. At some point, you cross the stream further above, and you must keep going up as the trail gets less steep until you reach the northern —and the lowest — part of the top of the Rocha do Chambre.

The woods stretch down to the left for a long distance, and, a bit more to the right, they go up the Pico das Pardelas. Even more to the right, the Biscoito Rachado still displays its elevations and gorges. Do not spend too much time





here, for as you walk towards the rock's highest peak along the right side you will find better points to enjoy the landscape.

A thick rope and some steps made of metal grids will help you cover safely the steepest climb, even tough some "giant" steps are occasionally required. Use the rope, because the trunks are covered with what resembles some sort of sticky alga. Small "windows" in the vegetation will allow you to see the landscape. The staircase ends and you move away from the rock for a few minutes before you start climbing again. You enter a wood once more. The rock in front of you is covered with big yellowish green tufts of *Sphagnum sp*.

The whole hiking trail is made within the Protected Area for the Management of Habitats or Species from the Central Plateau and Northwest Coast, but from this rock, and as far as the eye can see, we are presented with the view of the Nature Reserve of Biscoito da Ferraria and Pico Alto. This area was also classified as Ramsar Site in 2008, with the name Central Plateau of Terceira (Furnas do Enxofre and Algar do Carvão).

This is the last time you experience the freshness and cosiness of the woods. You start covering the high-altitude natural pastures, occasionally filled with invading species like the *Sphagnum sp.*, the *Polytrichum commune*, the *Calluna vulgaris* and the *Holcus rigidus*.

After going down, and past a stone wall, when you reach a particularly wet area, you will start the final climb, that will require a final extra effort.

Walk along a footbridge made of trunks, cross a narrow-fenced field and you will reach the top, continuing along a deep ditch that separates you from the higher pastures. A few more minutes of walking, characterised by dazzling views in all directions, and you finally arrive at the triangulation station that marks the highest point in the trail: 704 metres.

You start to cover the steep slope from the top of the rock. Further down, the Biscoito da Ferraria ends and gives place to the pastures that go up the Pico do Tamujo and surround it, stretching towards Sanguinhal. You will cross another bridge, and further down you have the fences installed to prevent any fall from the Rocha do Chambre viewpoint. Approximately 10 metres before, you will find a gate on your right that opens to the first of four pastures you will have to cover on your way down, along a partially forested water stream. Here, like in the pastures, the trees display the damages caused by the strong west winds that blow up the slope.

On your way down, you will see the *Pico do Fogo* in front of you, and, behind it, in the distance, the Picos Gordos. You can also see *Pico Gaspar*, more to the left. And, behind all these, is the east slope of the *Santa Bárbara*'s huge volcano. When the steep terrain ends, you arrive next to some agricultural structures used for wild livestock. Do not be surprised if you see bulls in the pastures surrounding a small, shattered peak, whose stone walls are topped by palings as an additional protective measure against possible charges by these animals.

Turn right and walk along the 500 metres road that leads to a shed where a wall was transformed into a staircase that you must climb, entering a straight path. 740 metres later, you reach a fork where you have already been. All you have to do now is take the red lapilli and cover it towards the hike's starting point.



TRAILS OF THE AZORES



PRC8 TER

Relheiras de São Brás

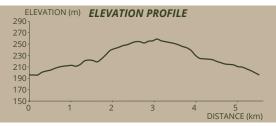
Difficulty: Easy Extension: 5 km Time Average: 2:00h Category: Circular











PRC8 TER Relheiras de São Brás

This walking trail begins at the pleasant Baldio de São Brás Leisure Area. Since this hike is circular, you will end it in this exact same spot. Hence, when it is over, you can enjoy a bit more this picnic park.



Leave the park and turn right, going along the Canada do Baldio for about 300 metres, until you find a wheeled axis of an old oxcart over a pedestal, placed here when this hiking trail was inaugurated. Notice the grooves where the wheels are set: they correspond to the marks known as *relheiras*. Enter this dirt path called Canada da Fonte do Cão (Dog Spring Lane), a name you will understand later.

Past a rubbish dumping sign placed by the local council, you begin to see deep *relheiras* on the ground, open on the lava by the wheels of the constantly passing oxcarts, probably loaded with the firewood that grew in this *biscoito* (wavy lava layer). This is one of the main attractions in this hike, serving as a testimony to the use of the land and the labour as a means for paving the way to survival.

If you look closely, you will see two kinds of *relheiras* in this old path: the V-shaped ones and U-shaped ones. The first date back to more than 200 years ago, when nails were still used on the wheels, perhaps in order to reduce the wearing away of the wood or to prevent the carts from sliding on the lavic stone surface. Then came the wider U-shaped wheels, and, because they rolled inside the original *relheiras*, the V-shaped grooves where they travelled became U-shaped. That is what happened in the first dozens of metres of this path.

In the end, the path is covered with grass. Here, the vegetation is not very rich, consisting mainly of common species.

You will walk past a sign on your left — placed by the Scouts National Corps – 713th Group of São Brás, the entity responsible for promoting this nature trail — until you finally reach the Fonte do Cão: a small cavity in the ground with a wrought stone ring over which some stones piled up. It is highly likely that it only served as a drinking through for dogs that came here with their owners. According to what I have been told, it contains water all year round, and, if that is the case, the amount that evaporated or was drank had to be

PRC8 TER Relheiras de São Brás

replaced somehow, maybe through a water stream that runs between the underground stones. Which is not perceivable, though.

Keep walking until you find the V-shaped *relheiras*, quite distinct and long. This is the most interesting stage of the hike. The lava that flowed here and turned into rock created occasionally flat rocky mantles, forming even and beautiful paved surfaces, "scratched" only by the *relheiras*, here and there covered with the wonderful colours of the mosses that benefit from the humidity and shade that characterise this area. Keep walking along this old path and you will soon find yourself in a forest with eucalyptuses and many *Solanum mauritanum* and *Pittosporum undulatum*.

You will find very few forks. But when you do, pay attention to the signs indicating the right path to follow, which is usually the largest and the one that curves the least. You will pass by two water tanks, one of which is right next to the trail, but because of the shades of the trees they go almost unnoticed. Further ahead the lava stones disappear: keep walking along the old path, in between *Morella faya* and *Cryptomeria japonica*, until you spot a huge boulder to your right. From here you can already see a metal gate through which you will leave the Canada Larga, making your way back to the starting point, which is 2,3 kilometres away.

Now turn left and begin going down that road with red lapilli and asphalt stretches, ignoring all the paths. On your right is the north slope of the Serra do Cume. Higher trees and a number of low woods that permanently cover the soil start to appear on both sides, while the occasionally renewed pastures take up the rest of the landscape around you. After a sharp curve, large banksias appear, and an unusual "fence" consisting of 50 tall eucalyptuses separates the road from the $P\tilde{a}es'stream$. This creek, where some water will eventually run after the heavier winter rainfalls, is completely characterless, filled with vegetation and debris.

To a large extent, many of these water streams no longer serve their original purpose, mostly because of the clearing of the lands and the introduction of agricultural activity in their catchment basins, which promoted the retention of water to be used in agriculture as well as a greater infiltration of the water in the soil.

You will see a small white house with a green door on the right side of the road, where a hole was dug. This hole is probably the one that supplies water for the agricultural land you will find further ahead, also to your right. Look to the pastures slope to your left. The stone walls are set on an approximately one metre high rocky mantle covering an older paleosol. This is the lava flow that formed the *Biscoito das Fontinhas*, the lava stones that are part of it and the ground over which the *relheiras* you have seen were open. The lava probably flowed here over existing lands a little more than 3000 years ago, when the eruptions inside the Guilherme Moniz caldera occurred. These highly fluid basaltic lavas produced large flows, this being one of them.

Soon after, you will find yourself back on the *picnic park*. If you want to, take the opportunity to enter it and rest for a while in the middle of the eucalyptuses and the curved-trunk acacias that provide the shade cast over the structures commonly seen in these places.



TRAILS OF THE AZORES



PR1 SJO

Serra do Topo - Caldeira de Santo Cristo - Fajã dos Cubres



I have no doubt that the Fajã da Caldeira de Santo Cristo is the main goal for the majority of those interested in walking trails in São Jorge. As they want to return to the point of departure, many choose to walk from the Fajã dos Cubres to the Fajã da Caldeira de Santo Cristo and back, but it is far more interesting to follow the trail down the cliffside. Bear in mind that this trail is within the Protected Landscape Area of the Northern Fajãs, and that, since 2016, the Fajãs of São Jorge have been classified as a UNESCO Biosphere Reserve.



The trail begins in the Serra do Topo hills, via a path leading to pastureland, which starts on the regional highway, where there is a small but functional car park with visitor information. Keep going along the path and turn right at the end, where you will find a footpath lined with hydrangeas, which has steps made of stone or others dug out of the earth. Now you will begin the descent from the cliff top to the Fajã da Caldeira de Cima. You will see a shelter carved out of the rock which has often been used by walkers to escape from the rain.

The natural vegetation is typical of mountainous areas, covered by *Juniperus brevifolia*, and is extremely rich. There are too many species to list here but the *Sphagnum palustre* is of particular interest, where tiny seedlings of *Sanicula azorica* sprout up.

This route offers spectacular views of the deep valley, with a succession of ridges and ravines covered in woodland. The landscape, which draws the eye over the hillsides to an ancient building where the streams appear to unite, is simply stunning. Every curve and boulder along the way is like a

vantage point, tempting one to take another photograph.

The descent continues along a wide track, with sweeping views of patches of natural forest invaded by hydrangeas and a patchwork of fields, dotted here and there by large *Erica azorica*, struggling against the invasion.

The gates along the trail (and there are a number of them) are made of v-shaped logs of wood, and are rare pieces of engineering, some of which have springs to force them back to the initial position. If this is not the case, take care to leave them as you find them. As the descent continues, new sounds can be heard: the *Regulus regulus inermis* singing above the bay trees, as the water cascades over the pebbles. Winding our way through the landscape, we'll get there eventually.

The house by the bridge that was glimpsed from further up comes more clearly into sight. But first there is another bridge to cross over a stream of running water. The path becomes wider and is paved. Some indications of distances and altitude are found painted on the rock.



FAJÃ DA CALDEIRA DE SANTO CRISTO

This fajã, which belongs to the parish of Ribeira Seca, is certainly one of the most emblematic and most beautiful fajãs on São Jorge Island. In the 19th century, over 100 hundred people lived there permanently, but today there are only 10 or so inhabitants, even though a significant number of people spend part of the year there. In recent years some of the houses have been rebuilt or renovated as holiday homes.

You can still see dairy cattle on the landscapes of the fajã, whilst other land is used for subsistence farming. On 14th October 1960, a public telephone was installed, and later an electricity network was set up, run by a small generator. A sloping jetty was built inside the lagoon to make it easier to haul up boats, whereas previously they had had to be hauled over the rocks. The 1980 earthquake caused landslides on both paths giving access to the fajã and destroyed the telephone network, isolating the Caldeira de Santo Cristo from the rest of the world. A Portuguese Airforce helicopter had to be used to evacuate the inhabitants. Thanks to its good waves and magnificent landscapes, the Fajã de Santo Cristo is considered an ideal spot for bodyboarding and surfing, and has become increasingly popular with surfers. The warm waters of the lagoon also attract bathers and holidaymakers to the fajã.

Finally, you reach the bridge. Above, in the middle of the stream, next to the ruins of an old watermill, one of seven that are said to have existed there, grows the endemic *Rumex azoricus* with its exuberant green leaves. Right there next to a well renovated house, it reminds one of a sunny summer evening...

A few families used to live in the *Caldeira de Cima*. They would grind cereal for themselves and their neighbours, weave cloth and make wicker baskets. Two springs, the Fonte dos Inhames and Fonte da Família met the needs of the inhabitants and their crops. Nobody lives in this *fajã* any longer, even though a few people spend part of the summer there.

Just the other side of the bridge, to the right of the main path, is a small pathway that leads a few metres lower down to small waterfall, heralding other larger waterfalls further downstream.

After this brief, refreshing detour, return to the main path and continue onwards. Cross another bridge over another stream. You will find a fountain, with drinking water. Continue the descent, keeping to the path on your left, across small fields and past some stone shacks where agricultural equipment is stored.

At the foot of the cliff, on your right, near the sea, you can see landslides from bygone days, which seem to want to form new *fajãs*, even though



they are inaccessible by land. Then suddenly... the stunning *Fajã de Caldeira de Santo Cristo* comes into sight, and in the background, the islands of Graciosa and Terceira.

Go on down until you reach the $faj\tilde{a}$, taking care not to slip on the loose stones. If you are curious and don't mind walking an extra kilometre, before entering the $faj\tilde{a}$, climb up the rock in the opposite direction, to the mouth of the stream you crossed a short while back. If you climb to the top, you'll be able to see the cascading waterfall of fresh mountain water, which forms huge deep pools in this final stage of the trail. The stream is home to freshwater eels, which are very timid and well camouflaged. They hide amongst the pebbles so time and patience are required in order to catch a glimpse of them.

Back in the $faj\tilde{a}$, the path leads to the large natural wall formed of stones piled up by the sea, like a dyke protecting the orchards, houses and suchlike. "Keep the fajã clean": good advice written on some spots in the $faj\tilde{a}$ by a group of friends. Here waste is separated and collected in curious recipients that can be seen at various places around the $faj\tilde{a}$.

Pass a restored drinking fountain before reaching the Senhor Santo Cristo chapel, which was blessed on $10^{\rm th}$ November 1835. Its feast day is celebrated on the first Sunday in September, with a mass, procession and an auction sale, when many of the devote go to the $faj\tilde{a}$ to fulfil their vows. Many people flock to the chapel when mass is celebrated on religious holidays, but they leave just as quickly as they arrive... and the fajã soon returns to its usual peaceful state. Behind the chapel are excellent public conveniences, kept in an immaculate state by 'Ms' Fátima, who also helps to take care of the chapel and lets visitors enter via the western door.

August really is a special month, during which the number of visitors rises considerably: those who go to spend days or weeks of the summer holiday there; those who spend a few hours there to admire the scenery; and the weekend seafood catchers, who go to the lagoon from the $15^{\rm th}$ August onwards, when the clam fishing season reopens. The locals of the $faj\tilde{a}$ say that in August, when the clams are recovering from the spawning period, they are "skinny", and that the best time to catch clams is in January, but not so many are available at that time of the year.

The lagoon, where the salty sea water barely mixes with freshwater, is of special interest thanks to its landscape, its population of clams and as a habitat for birds. The lagoon was classified as a *Natural Reserve* in 1984 and was later recognised by the *RAMSAR International Convention* as an important habitat for dozens of migratory seabirds which pass through the lagoon on their migratory route.



Travel through space and time in the fajã... and while you're there, go to "O Borges Café/Restaurant", where you can have a meal, with or without clams from the lagoon, or just have a drink with your friends. As you walk around the paths in the fajã, following the signs, you will come to the Centro de Interpretação da Fajã da Caldeira de Santo Cristo, which teaches visitors about the geology, biology, landscape and history of the fajãs of São Jorge, and especially of the Fajã da Caldeira de Santo Cristo and Fajã dos Cubres. It is a must to visit this permanent exhibition of objects and images that help gain a better understanding of the natural and cultural context of the place.

As you leave the *Fajã* da *Caldeira de Santo Cristo*, you pass near the old cemetery, which was closed after the earthquake on 1st January 1980. To the far west of the lagoon, a track at the base of the rock leads to the *Fajã* dos *Tijolos*. In this tall rock, where the *Azorina vidalii* grows, the Furna do Poio lies hidden, a natural cave with a small lake inside. Go past a rock pool, which had a stone washing trough that was used regularly years ago. Keep on along the dirt track, which has a stone surface on part of the way up.

Further ahead, after passing a small bay, you will see the $Faj\tilde{a}$ do Belo. Walk on down to the $faj\tilde{a}$, once home to over 130 people, where houses were also destroyed by the 1980 earthquake. Some of the ruins are now being recuperated, some of which are quite large, which shows that the place is being brought back to life.

The track soon climbs up again as it approaches the Fajã dos Cubres. Now you are close to your destination. The trail ends at the car park used by those who follow the trail to the Fajã de Santo Cristo and back. Continue onwards and you will soon pass the lake, and come to the chapel of Nossa Senhora de Lourdes, and a nearby café where you can relax while you wait for your transport.

TRAILS OF THE AZORES



PR2 SJO

Serra do Topo - Fajã dos Vimes

Difficulty: Hard Extension: 5,3 km Time Average: 2:30h Category: Linear



PR2 SJO Serra do Topo - Fajã dos Vimes

We start this trail near the wind farm of Serra do Topo, on a small path that detours from the main road, offering a superb view over Pico island. Go down and turn immediately to your left, towards one of the elec-



tricity posts that carries power to the *Fajã dos Vimes*. Continue on towards another post ahead of you, along a path lined with hydrangeas. Down below, right next to the sea, you can see the outline of the Fajã dos Vimes.

The path goes down and then rises again after you cross a water course which descends from the clifftop. There one finds the earliest species of trees and bushes of the natural forest which covers the entire hillside: *Vaccinium cylindraceum* or Azores blueberry, *Ilex perado ssp. azorica*, and *Erica azorica* are amongst the most widespread. Keep on going, past a breeze block house in ruins, until you reach the next water course.

In the deep valley which stretches at your feet, you again catch sight of the $faj\tilde{a}$ in the distance. On a small stone, you will find a sign indicating you should turn right, onto a narrow footpath, which is also used to move cows from one pasture to another. Continuing ahead, you will come to a dip in the path, which goes beneath some juniper trees $(Juniperos\ brevifolia)$ and then rises again on the other side.

Cross another gate, yet another water course and turn sharp right... do not climb up the grassy slope ahead of you. A little further on, follow a path where the tree tops join overhead to form a tunnel. The surface of the ground, which is either dirt or stone, is wet and can be slippery. This

PR2 SJO Serra do Topo - Fajã dos Vimes

tunnel, which here and there has windows to the sea, is full of endemic plants: Lysimachia azorica, Cardamine caldeirarum, Pericallis malvifolia, Laurus azorica, Carex vulcani, wild orchids (Platanthera micrantha), the purple hued Prunella vulgaris, Bellis azorica, Hedera azorica, Myrsine africana, Hypericum foliosum... and more.

Suddenly you come to a crossroads with 3 options: take the steepest, narrowest path, which is the old path that leads to the *Fajã dos Vimes*. Over the years the stones from this area have been adapted to build steps and protective walls along the path.

It is said that *Vaccinium cylindraceum* or Azores blueberry grows in this area. São Jorge seems to have produced a different variety of this endemic species, with white flowers, whose fruits were picked to make jam (as if they were regular blueberries).

As one descends, the vegetation grows taller and denser, conserving the moisture, which encourages mosses and ferns to grow. The steps are sometimes crooked or missing so it is necessary to take care on the descent, especially on the final stretch, where a ramp with loose gravel leads you to the tarmac road. Go up the road until you reach the stream, on a tight curve. The sign next to the steps leading down to the stream invite you to go down to spring of "bitter water". There are various such springs of slightly sparkling mineral water on a number of the islands of the Azores. Taste the water... and I'm sure that you'll agree that it was aptly named.

Continue to climb up the road. You'll come to another stream and another bridge. Walk a little further and turn onto a secondary road, with dirt and volcanic gravel, which takes you down between small orchards



COFFEE FROM THE FAIA DOS VIMES

It is not known exactly when the first coffee plants were established in the fajã. Truth be told, there were excellent conditions for this species of coffee plant (Coffea arábica) to germinate, develop and fruit here. Each plant has good yield one year and a poor yield the following year, and the cycle repeats itself. The coffee is harvested between May and August, with a peak in June and July. According to Mr. Manuel Casimiro, who has experience in the matter, there are various coffee-growers in the fajã (although his coffee plantation is the only one I have visited) and the best way to prepare the coffee is to dry the fruit in the sun, and then to use a stone to crush the dried outer skin in order to hull the fruit. Once the beans have been removed they are roasted in a frying pan or wood stove (some use a gas oven), and are turned frequently. After being ground, the coffee is ready for use. Coffee is also produced in the Fajã das Almas and Fajã de São João but on a smaller scale. I am happy to say that I believe the Fajã dos Vimes is the northern-most point in Europe where coffee is produced for commercial purposes.

PR2 SJO Serra do Topo - Fajã dos Vimes

with fruit trees and pastureland. As you descend, you can hear the sea rolling the pebbles. Then you reach a cement surface, where you can see the first houses and you get back onto the tarmac road, at the western tip of the *fajã*. From here you get a view of the whole of the *Fajã* dos *Vimes*, and of the *Fajã* dos *Bodes* in the distance.

Over the centuries the Fajã dos Vimes has been afflicted by natural disasters, such as the 1757 earthquake, which killed more than 120 people, and the storm of 1899, when the sea invaded and caused damage to the entire coast of the Island. In 1992, a huge storm caused torrential rains in the hills above the fajã, and the Vimes' stream stream burst its banks and destroyed the bridge there, which had to be completely rebuilt. Various water courses flow out here, namely the Vimes' stream, which still has water mills on its banks, the Capadinho's stream o and the Grotão do Modelo (or Grotão).

Detrital $faj\tilde{a}s$ like this one, protected by the cliffs, often have a milder climate, idea for cultivating more tropical crops, as is clearly the case of the $Faj\tilde{a}$ dos Vimes. Sometimes resorting to glasshouses, protected from the dominant winds, some vegetables are forced here, resulting in produce of high quality and quantity. One can find: banana trees, taro (of great historical importance in this $faj\tilde{a}$), tomato, aubergines, vines, sweet potato, cantaloupe melon and various types of cabbage, amongst others. But the biggest surprise for visitors is when they learn that there are coffee plants in the $faj\tilde{a}$ and that they have the chance to taste $S\tilde{a}o$ Jorge coffee. To do so, follow the road until you reach the bridge, then turn up to the left to the $Caf\acute{e}$ Nunes, where Mr. Manuel Casimiro will serve his famous bica, a strong black coffee which you may well find slightly more acidic than normal.

This fajã is also famous for its woven coverlets, the Colchas da Fajã dos Vimes, made of wool, with a raised stitch. They used to be woven on wooden looms, and were made in three separate pieces which were later stitched together to form a wide coverlet, known as the "3 branch" coverlet. They also wove blankets or simple table runners. In times gone by, a woman from the Fajã dos Vimes had a number of looms working, giving employment to several other women and also serving as a kind of school to teach the secrets of the craft and ensuring its continuation. Nowadays one can observe this technique and maybe buy a souvenir when visiting the Café Nunes, where Mr. Manuel Casimiro has restored several looms, which are in operation right above the café.

Having recharged your batteries, pass by the Primary School, which was closed down some time ago, and a little further on you will reach the church, the *Ermida de São Sebastião*, where the feast of Nossa Senhora do Carmo is celebrated on 16th July, and usually opens its doors to any curious... or tired walkers.

This trail ends at the port, but do not let that stop you. Get to know more of the $faj\tilde{a}$ and its inhabitants by exploring it on foot.

TRAILS OF THE AZORES



PR3 SJO

Fajã dos Vimes - Lourais - Fajã de São João

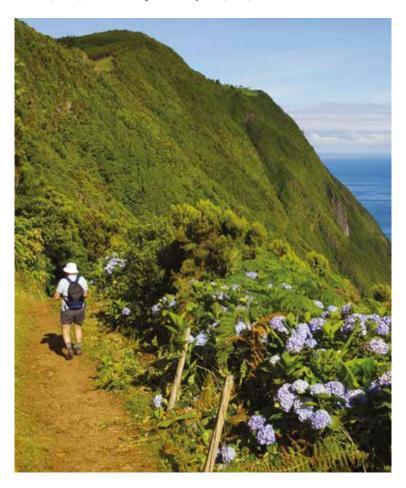
Difficulty: Hard Extension: 10 km Time Average: 3:30h Category: Linear



DISTANCE (km)

PR3 SJO Fajã dos Vimes - Lourais - Fajã de São João

This walking trail connects the *Fajã* dos *Vimes* and the *Fajã* de *São João*. However, due to the steep climb from the Fajã dos Vimes to Lourais (from 0 to 400 metres), less experienced walkers are advised to begin the trail in Lourais and opt either to follow the trail down to the Fajã dos Vimes (West) or to the Fajã de São João (East).



The Fajã dos Vimes, on the south coast of the island, is in the Ribeira Seca parish. Both its landscape and people make it a very attractive fajã. It is very difficult, if not impossible, to identify houses with architectural features of the early centuries of settlement, but there is a large area of houses as well as small plots of land where traditional crops, such as vines, are grown. Several dozen people live here all year long. However, the population used to be larger, which justified the opening of a primary school on 12th April 1886 and which remained open into the 1990s.

PR3 SJO Fajã dos Vimes - Lourais - Fajã de São João

The trail begins next to the port of the Fajã do Vimes and the road goes eastwards, as far as the Fajã dos Bodes. On the roadside, as in many other spots in these fajãs, small springs spout out water onto the earth, which are sometimes being used for agricultural purposes. As one enters the Fajã dos Bodes, there are more signs of timber wires. When they first appeared, the timber wires were a means of transporting materials at high speed: a wire attached to a high point on the cliff side, or at the top of the cliff, was stretched down to the fajã below. Using a winch at the base of the wire, tension was produced to raise the wire into the air. Materials were then allowed to slide down the wire, without any speed control. A wooden platform at the base (and later, tyres) was used to absorb the shock of the landing. These wires were used mainly for transporting timber, cut from the forests on the cliffside. More recently some wires have been used to transport other materials, namely for the construction and repair of houses, bottles of gas and such like. In the Fajã dos Bodes there are still quite a number of wires, and although they work much the same way, there are some structural differences among them. The majority have now been abandoned.

Large stone boulders lie here and there, having broken away from the rocky hillsides and landed in the orchards, making work more difficult for the gardeners. These huge boulders, which are a common sight in many of the *fajãs*, are called *poios*.

At the end of the Fajã dos Bodes, after passing a pebble beach, the road becomes a footpath. Beyond the water course, some haylofts are main-



FAJÃ DE SÃO JOÃO

The Fajã de São João is in the parish of Santo Antão, and is one of the largest faiãs on the south coast of the island of São Jorge. It has an abundant water supply, with the largest stream on the island, whose permanent source forms huge waterfalls as it descends from the clifftop. It has a particularly mild climate, and has been inhabited since 1560, when reference was first made to the residents there. The fajã was severely hit by the landslides caused by the large earthquake on 9th July 1757, (which was known popularly as "o Mandado de Deus" or "God's Commandment"), and a large number of the population were buried under the landslides which are still visible down the hillsides and along the coast. In São Jorge alone, 1053 people were "buried in the ruins" and later, counting the missing and wounded who also perished, the number rose to around 1500. After being rebuilt, it was again severely affected by the earthquake on 1st January 1980, which wreaked havoc upon the place. The fajã was famous for its vines and also its fine production of figs, walnuts, oranges, apples, chestnuts, pineapple and coffee. Some of the crops are still grown, although less systematically, as well as vegetables for self-subsistence. The production of Jaquê wine deserves special mention, as well as the loquat and fig brandies. Today, the Fajã de São João is a popular summer resort.

PR3 SJO Fajã dos Vimes - Lourais - Fajã de São João

tained as a support for vine-growing. The path gets steeper and the steep climb up to Lourais begins. When you see the first steps made from tree trunks, look back to admire the outline of the island and the fajãs left behind, down by the sea. Continue up the path, stopping to rest whenever necessary. The higher you go, the more natural the vegetation, where *Erica azorica*, predominates.

Higher up, on one of the curves in the path, take a final photograph of the Fajã dos Bodes, Fajã dos Vimes and Calheta. Half way up, you will come to the *Cedros' stream*, which flows all year long, filling the little pools alongside the stream. Take care as the stepping stones can be very slippery. Keep climbing until the ground becomes flatter. You will now get the first view of the *Fajã de São João*. The orchards, Japanese red cedar and the hydrangeas are a sign that you are entering Lourais.

The way out of Lourais is via an inward path that looks as though it has been opened up in order to cut down and remove timber. Walk a little further until you reach a tarmacked road and houses ... the rest of the trail is downwards. After the last house, the road becomes a dirt and gravel track, leading into the deep valley of the Salto's stream. Here the water has been collected and channelled through the black pipe that accompanies you most of the way down. The path takes you to the $Faj\tilde{a}$ de $Al\acute{e}m$ (not to be confused with the $Faj\tilde{a}$ de $Al\acute{e}m$ on the north coast where there is another walking trail), half way along the route to the $Faj\tilde{a}$ de $S\tilde{a}o$ $Jo\tilde{a}o$. On the easy descent, even though loose stone may slip underfoot, there are vines on the higher ground and you can hear lots of birds chirping. Other than that, you have the scenery, which is very pretty, with the constant view of the $faj\tilde{a}$ ahead of you.

The path widens and the surface improves providing access to the trucks that collect the grapes, some of which used to be crushed right here, by the press that can still be seen in at least one of the haylofts at the roadside.

You eventually reach the cove where the *Stream of São João* flows into the sea, with its pebble beach where the sea laps the foot of the hillside, and then you enter the *Fajã de São João*.

The first houses and some huge willow trees await you at the entrance to the $faj\tilde{a}$. There are only another 700 metres to the end of the trail, via a main road which serves the inhabitants, part of which is paved in typical portuguese mosaic cobblestones, called calçada, with some narrow streets and houses with rural architecture, of obvious interest.

The Fajã de São João belongs to the parish of Santo Antão, and is one of the largest fajãs on the south coast of the Island of São Jorge.

The trail ends at a drinking fountain from 1896, next to the *Chapel of São João* church, built in 1762. In order to visit the church, simply ask for Ms. Judite in the *Café and Mercearia* Águeda just across the street. Quench your thirst and stop for a chat before continuing your journey.

TRAILS OF THE AZORES



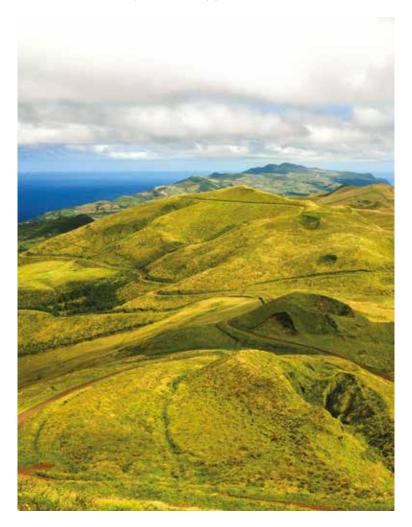
PR4 SJO

Pico do Pedro - Pico da Esperança - Fajã do Ouvidor

Difficulty: Medium Extension: 17 km Time Average: 4:00h Category: Linear



The trail starts in the direction of Pico do Pedro, on the main road between the Urzelina parish and the hamlet of Santo António, in the parish of Norte Grande. The scenery is typical of São Jorge, with green fields, dotted with colourful, predominantly yellow flowers.



The cows that produce the delicious, famous São Jorge cheese occasionally appear on the trail. The first part of the walk winds between a succession of scorified basalt cones, which form a crest along the backbone of the island. Strangely, the area is covered in grasslands, sometimes dotted with Japanese red cedar and hydrangeas, rather than the forest that is found at high altitude on most of the other islands.

About 400 metres from the point of departure, there is a small tank which is fed by the overflow from the slopes. It has a tap and a water trough, presumably for cattle to drink. The humidity is ideal for species which commonly decorate the roadsides: *Tolpis azorica*, *Hypericum foliosum*, *Vaccinium cylindraceum*, *Woodwardia radicans*, *Leontodon filii* and *Equisetum telmateia*. After going around the Pico Verde peak but before reaching the Pico do Carvão, you will see a little pond to your right, which is normally home to a pair of ducks and their offspring. There are a lot of flying insects in this area, including bees, dragonflies and butterflies, but fortunately there are no mosquitoes.

As you pass the Pico do Carvão, you get a sweeping view over Manadas, on the coast, and the majestic island of Pico. Further ahead the Morro *Pelado* and its crater come into view. The rim of the crater is lower on the side nearest the trail. Inside is the Algar do Montoso cave and alongside the path there are several endemic plants, some of which are quite rare, such as the *Chaerophyllum azoricum*, *Ammi trifoliatum*, *Scabiosa nitens* and *Euphrasia grandiflora*.

The Algar do Montoso is situated at an altitude of 1000 metres, inside the Morro Pelado, and is the largest volcanic cave in the Azores, with a depth of approximately 140 metres. The descent inside is made via two large openings, using potholing techniques, with ropes. On the descent, there is an upper chamber, which forms the first platform, where one can appreciate the vegetation covering the walls of this part of the cave. At the bottom of the cave there is a large chamber, approximately 150 long, 70 metres wide and 50 metres deep. There is also some animal life in the cave, including the unique *Trechus isabelae* beetle.



FAJÃ DO OUVIDOR

This is one of the largest $faj\tilde{a}s$ in São Jorge, and gets its name from the days when most of the land there belonged to the "Ouvidor" or Ombudsman, of the island Governor, the "Capitão do Donatório". The present road was not opened until 1948, to provide safe and easy access for traffic. The fishing port, with a winch, is still an important harbour for small fishing vessels and a point of departure for connections to neighbouring $faj\tilde{a}s$ which cannot be accessed by land. Depending on the season of the year, here you can find: Cory's shearwater, common tern, seagulls, as well as various perching birds which live in the woods on the cliffsides.

The fajã is fed by various water courses which fall from their source on the clifftop to the fajã down below. There are about thirty houses there, many in a modern style, but less than half of them are lived in permanently.

Climbing up the path on the same side as the Morro Pelado, do not forget to turn back to admire the view of the south coast of the island. Head on towards the Pico da Esperança, the highest point on the island at an altitude of 1053 metres. The path goes near the spot where there was a tragic air crash in 1999.

This area is classified as a *Protected Area for Management of the Habitats* or Species of the Pico da Esperança and the Central Plateau.

You find the odd *Rumex azoricus* on the verges and a little further on you come to a turning off leading up to the Pico da Esperança. Climb to the top and follow the ridge of the crater in an anticlockwise direction. Inside the crater there are two small lakes... and on the outside, there is a magnificent view of the surroundings in various directions: to the east, is a line of volcanic cones facing the Serra do Topo, to the west is the Pico do Montoso and Morro Pelado, and to the north is the parish of Norte Grande. Pass the survey marker, keep going and walk back down to the path to continue the trail. The *Central Plateau of São Jorge (Pico da Esperança)* has been a *Ramsar Site* since 2008.

Ahead are the Pico do Areeiro and the Pico Pinheiro. Some rocky outcrops remind us of the geological interest of our surroundings: there are lumps of rock at the roadside covered in white lichen; there are multi-coloured deposits of volcanic scoria on the slopes, where one can see the gradual weathering process that has turned them into soil; and one can see the lava flows which sometimes form small limpet-shaped caves.

Once you have passed the Pico Pinheiro, head for Norte Grande. The path bends and you will come to a junction but continue down on the path to your left. Some of the first woods of Erica azorica, Juniperus brevifolia, Vaccinium cylindraceum and Frangula azorica appear. The water courses are deeper, covered in ferns. There's a new crossroads where you should turn left. The dirt track is replaced by an asphalt surface, and the land is occupied by medium altitude pastures. Go down for almost one kilometre, and then leave the asphalt and take the dirt track halfway down, to your left. On the way, you can see the Pico da Esperança, the Morro Pelado and Pico Verde where the trail began. To your right, the hillside goes as far as Norte Grande, and then down to the fajãs on the coast, with Graciosa island close by. About 1,8 kilometres on, there is a turning going downwards to your right, which is used by farm vehicles, so you can see some of the equipment used in cattle farming, such as the mobile milking machines and feeders. You will come to a fork in the path as the church tower comes into sight. Turn left and you will reach the regional highway, right opposite the Holy Spirit Shrine.

Cross the road, and, if it is open, visit the church of *Nossa Senhora das Neves*, built in 1762, where the walls of the main chapel are decorated with blue and gold hand-painted tiles. The former church was involved in what was known in São Jorge as the "*Motim dos Inhames*", or "Taro Mutiny". In 1694, the men sent to collect tithes of taro were mobbed by the local population. The priest went to the bell-tower of the church and burned the list of those involved in this popular revolt, as living condi-

tions were harsh enough for the locals, without being forced to give up one tenth of their produce.

A few metres along the highway, turn left onto the path that is used by most visitors to the Fajã do Ouvidor. Pass the Casa do Povo community centre on your left and the old concrete football ground. Further down you will come to the former primary school, which has now been converted into the Casa do Parque and Ecomuseu da ilha de São Jorge, inaugurated in August 2012. It houses the administrative services of the Natural Park and also has a reception area for visitors. It is well worth a visit. There is a permanent exhibition, guided by the friendly park employees, who will give you all the key information about the island of São Jorge. This visitor centre is open every day during the summer, but closes for lunch between 1.00 and 2.00 p.m.

The path continues downhill and weaves between allotments until it reaches a fork, with a road giving traffic access to the fajã to your right. However, you should turn left towards the vantage point a few metres ahead. It offers a wonderful view of the Fajã do Ouvidor, so take some photographs or engrave it in your memory.

Go down the path next to the vantage point, which was the only path





to the fajã until the new road was opened in 1948. The path is full of bends and very steep and is partially paved. As the path widens, some chestnut trees appear, which is a sign that you are near to the road. Go down to the junction with another dirt road, where you will find a water supply station for farming, where you may well see vehicles filling their tanks. Take this track until you come out onto the tarmac road again, where there is a plane tree in the middle of a small roundabout. A little further down, next to the Chapel of Nossa Senhora das Dores, you can see the neighbouring Fajã da Ribeira da Areia in the distance and the area of the port. Walk a little further and then take the concrete path on your right, the old access path to the port, which will take you straight to the O Amílcar Restaurant, with various house specialities, including the aguardente de canela, or cinnamon brandy, which is highly recommended!

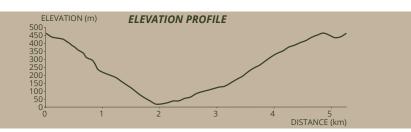
Do not leave the fajã without visiting the Poça do Simão Dias. About 25 metres up the road you will find a sign indicating the footpath to the spot, as well as the small lighthouse nearby. As the lava reached the sea, it formed interesting shapes and patterns, thanks to the phenomena of columnar disjunction, erosion and solidification, creating pools where you can enjoy a quiet bathe.



Difficulty: Hard Extension: 5 km Time Average: 3:00h Category: Circular

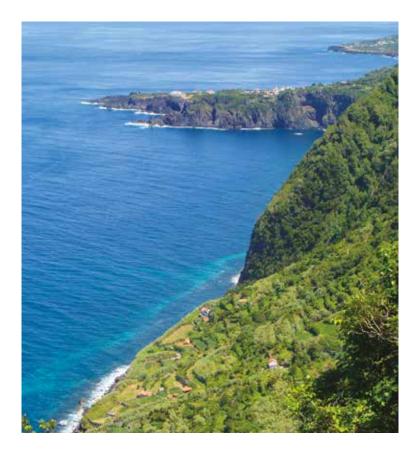






PRC5 SJO Fajã de Além

At the start of the trail is a church, which was privately built in 1936, dedicated to Nossa Senhora Auxiliadora.



Start the trail by going down the tarmac road until you see a sign to turn left, go down through a field, fenced off by a line of barbed wire, forming the beginning of the path to the Fajã de Além. There is a steep slope at both ends of the fajã, giving access to the allotments to the population of Santo António. The trail follows one of those paths down and returns via the other after crossing the fajã.

Before reaching the edge of the cliff, the path winds beside a small stream, sometimes through a tunnel of *Pittosporum undulatum*, with a stony surface in places. These paths arose from the need to reach the milder zones of the *fajãs* in order to cultivate produce for subsistence. This path is still used to reach the surrounding pasturelands. On the side of the path there are several specimens of *Chaerophyllum azoricum*, a rare flower endemic to the Azores.

PRC5 SJO Fajã de Além

Suddenly you leave behind the pastureland as you reach the edge of the cliff, where the cliffside is covered in natural plant species. In the distance lies the Fajā do Ouvidor, and even further away, the Fajā da Ribeira da Areia, both standing on lava flows: a sight well worth recording.

As you walk down you can see and hear the water springing from the rock or falling from the clifftop and trickling down the cliffside, and sometimes it produces a constant sound, hidden amongst the leaves of *Rumex azoricus*, taro and other species that prefer water-logged land. After a few more bends you will be able to see the Fajã de Além. Some young araucaria trees catch our attention; this species, of low or medium height, is quite uncommon in the *fajãs*.

Once you reach the bottom you can see about 20 stone houses, most of which are well conserved and cared for, standing slightly apart from one another, which is typical in the fajãs. There are no more than two or three paths to walk around the fajã, which are easy to make out, either earthen paths or stone paths, some of which have stone walls. You can easily find yourself in a private property, as public rights of way actually go across them. The space around the buildings is usually well kept, decorated with carnations and gladioli, sometimes enhanced by the *Azorina vidalii* bellflower which grows wild on the walls around the houses. Araucarias are also grown in the gardens. There are small allotments protected by *Erica azorica*, or broom, where a range of crops are grown, such as chili peppers, which are watered with drinking water which is piped by an efficient plumbing system which connects virtually all of the houses. Lemon and fig trees and vines also thrive here.

Cross a small stream using the 1° de Maio 2004 bridge (probably the date of its reconstruction), soon to be followed other water courses. Close to one of them is a small mill, built by Mr. Moisés, with a PVC tube for a sluice, and there is also an oven, used to dry maize, as well as to bake bread. If you take a quick look at the dented cogwheel, you realise that the cogs ceased to work years ago.

Certain details indicate that the folk from the fajãs were quite ingenious. The difficulty in transporting materials to the fajã led them to reuse and convert materials and utensils. A timber wire, which was certainly never used to transport timber, but rather bottles of gas, tiles, building materials and such like, is strung from the top of the cliff, where the trail ends, on the way out of the fajã. This device allows all the materials to be conveyed safely to the bottom, where a pile of tyres softens the landing.

I was told that there was a good chance I would come across one of the landowners as I walked down to the fajã and that I would be warmly welcomed, as the people are very friendly. This turned out to be both very true and opportune! When climbing up the rock, I met a friendly couple from Santo António who provided important details about this fajã. They told me that there used to be a water-mill there, long since abandoned. It was used to grind the maize which was grown and threshed

PRC5 SJO Fajã de Além



in Santo António and which was carried down to the fajã on one of the timber wires, as there were no windmills in Santo António. Some maize was grown in the fajã but sweet potato and taro were considered more important crops. They told me that nobody lives down in the fajã, partly because the sun doesn't reach the fajã between October and February, which makes it difficult to live and to work the land. After cordial farewells, I continued my walk. As I slowly climbed the path, I discovered small tributaries of the stream flowing on my left, forming a waterfall amidst the *Hedychium gardnerianum* or ginger lily, the *Rumex azoricus* and the beds of taro. The path seems to have steeper "steps" than those on the downward path. On the way out of the fajã, I took one last look at it and a final photograph.

At the top of the cliff, which can be reached by vehicles (though not necessarily all light vehicles), I found the structure which supports the modern timber wire, and a buoy, which I imagine is used to indicate when materials are about to be sent down. Of all the *fajãs* that I have seen in São Jorge, where there are no permanent residents, I can guarantee that this is my favourite because of the careful way in which the owners care for their lands. I hope you like it too.

TRAILS OF THE AZORES PRC6 SJO Norte Pequana

Norte Pequeno

Difficulty: Medium Extension: 11 km Time Average: 3:00h Category: Circular



PRC6 SJO Norte Pequeno

If you wish, you can visit more than three $faj\tilde{a}s$ on this trail. These $faj\tilde{a}s$ are within the protected area of the São Jorge Natural Park and have been classified by UNESCO as a *Biosphere Reserve*.



The trail begins near the Parish Council, in Norte Pequeno. Follow the regional highway until you come to a called Canada da Fajã do Mero. Go down this street, which is tarmacked, with totally rural scenery, agricultural plots with the odd house, some of which are in ruins. After 500 metres, you will come to the first fork: ahead of you is the old dirt road leading to the Fajã do Mero, which you should follow.

Large broom bushes dominate the scenery, forming hedges around the fields of pasture. After another 500 metres, there is another fork: take the path on the left, which is wider and flatter. *Ilex perado ssp. azorica, Laurus azorica, Vaccinium cylindraceum, Hedera azorica* and even *Frangula azorica* grow alongside the path. They are the first of various endemic plants that this trail offers to those who are interested in the local flora. You will most likely come across some lively rabbits jumping out along the path. After a further 1,8 kilometres, pass a turning on your left, which you should not take, and ahead of you there is a small group of tall, dense japanese red cedar trees, where you should turn to the right, and begin a steeper descent.

The loud birdsong and an inauguration plaque indicate the end of the wide path and the beginning of the footpath leading down to the fajã. The first part of the descent follows a wide, well-kept footpath, which follows a power line, with electric posts which, curiously, also provide public lighting. The electricity reaches a little further down, to supply energy to a pump which channels the water from the Sete Fontes spring through some pipes that you will have seen on the way down. This water will complement the public water supply to the parishes of Norte Pequeno, Calheta and Ribeira Seca. If you turn to the right, you will be able to see water from the different springs which gush out from the

PRC6 SJO Norte Pequeno

rock, and flow all year long. The inauguration of this construction, on 17th July 1991, is commemorated by the plaque that you saw at the beginning of the descent.

Cross over to the other side, where the path continues, but do not expect to find the same conditions further down. More endemic plants appear lower down: Ammi trifoliatum, Rumex azoricus, Euphorbia azorica and Polypodium azoricum. To your left, by the sea, you will catch sight of part of the Fajã da Ribeira da Areia, a typical lava fajã (different from the Fajã do Mero, which is detrital in origin, (composed of loose rock from landfalls), with its gleaming white houses. On this side, you can hear the sound of the water flowing. Continue down the path. Some areas are waterlogged due to the water courses that run down the cliffside, some of which flow abundantly all year long. Pass by a curious plantation of Phormium tenax, which is perhaps used to make lashings or mats. Further down are some flowering plants, the endemic Scabiosa nitens, and the first houses of the Fajã do Mero appear. Then you come to the area of allotments, with various subsistence crops, banana trees and some grass. Colocasia esculenta, which thrives in water, grows abundantly on the banks of the streams and requires little tending.

Two small streams flow out onto the pebbles, close to each other. It is easy to find them by looking where the taro is growing. You will come to a concrete slope, which is a road, in decent condition, giving vehicles



THE CHURCH OF SANTA FILOMENA

This pretty little church was built by Father António Tomé on a plot he owned in the fajā. It was blessed on 27th May 1889, and dedicated to Santa Filomena. As well as the church, there was also a house for pilgrims, which has since disappeared. Devout people from all over the island would come here to fulfil their promises. After the priest's death, his daughter (who was presumably recognised by him) inherited the church which was passed down through the family. Later, due to a dispute between the proprietors and the Diocese, the church was excommunicated and closed. The earthquake of 1980 partially destroyed it, and it remained in ruins for some time. It ended up being handed back to the Diocese and was rebuilt.

The Feast of Santa Filomena is celebrated on the last Sunday in August, with a morning mass, followed by a procession. There is also an auction sale, and soup is offered to all those who participate in the festivites, in a curious self-service affair. Dozens of people usually participate in the celebrations.

PRC6 SJO Norte Pequeno

access to the fajã, coming from the Fajã da Penedia. The idea is to follow this road in the opposite direction. However, if you wish, you can descend a little further to explore the fajã. You will come upon a curious thatched hayloft, with a modern padlock on the door. Long ago they used to catch plenty of good fish with rods and reels from the rocks or pebbles, so I hear... but I doubt that anyone fishes here these days. Long ago people had to be self-sufficient: they would go down to the fajã to work the land and catch fish from the sea. All year long one can see seagulls, rock pigeons and buzzards whereas Cory's shearwater and tern can only be seen at certain times of the year.

Go back to the Ladeira das Groselhas or redcurrant path (there are lots of redcurrant bushes at the side of the path) and begin the climb. Half way up, by a well restored house, you will see a tap with cool drinking water for passers-by. It is a pleasant, wide path, partly earthen and partly in concrete. Before going down to the Fajã da Penedia you will pass some houses which overlook the Fajã das Funduras, which is hidden down below.

When you reach the Fajā da Penedia, take the first turning on the left and visit the church of Santa Filomena.

Ease of access and later the appearance of cars meant that the social life of this fajã survived. It still has various houses, some recently built. Years ago, they were permanent residences but now they are only used for short stays, mainly on the eve of the aforementioned Feast of Santa Filomena.

The water came from a single spring on the cliffside, via a stream which used to flow down to the fajã. Later, in the 20th century, human ingenuity found a way to channel the water to the houses, hence the recent date on the drinking fountain: 1972. The crops grown in this fajã are similar to those in the Fajã do Mero, plus wicker for making baskets. In order to see the sea, you will have to climb onto the protective wall made from pebbles, which protects the path and the fajã from the sea's fury during the winter.

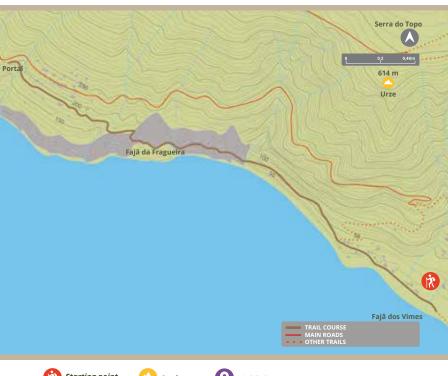
Turn your back to the fajã and begin to climb. Some vehicles may pass you on the way up. At a fork near the top you will find the access path to the Fajã das Pontas. Go down to this fajã... at least as far as the port. Or you can continue along the path to the Fajã da Neca. Despite being a modest sea port, with a winch and some open-topped boats, it is still one of the best on the north coast. When the boats put to sea they catch a variety of species: conger eel, forkbeard (*Physis physis*), and Mediterranean parrotfish (*Sparisoma cretense*), to name but a few. In its heyday, there were six timber wires here, all long since abandoned.

Return to the path which zigzags to the top of the cliff. On the way you can see walnut, fig and chestnut trees. Once you reach the tarmac, go up to the junction with the Travessa Poço do Jogo, on the left, which leads to the Fajã dos Cubres, and the *Travessa do Terreiro*, on the right, which you should take. At the following crossroads, turn left onto the Canada da Igreja and climb up until you reach the regional highway, where you should turn right, and a few metres further on you will get back to the point of departure.



Fajã dos Vimes - Fragueira - Portal

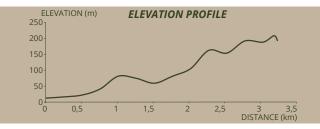
Difficulty: Medium Extension: 3,2 km Time Average: 1:30h Category: Linear











PR9 SJO Fajã dos Vimes - Fragueira - Portal

The trail begins at the church of São Sebastião in the Fajã dos Vimes and follows the main road to the west, along the coast, for about 500 metres. Pass a water fountain dated 1883 and keep on going along the tarmac road. This stretch, which takes you to the end of the Fajã dos Vimes, is common to trail PR2 SJO - Serra do Topo / Fajã dos Vimes.

When the path finally curves upward to the right, and the tarmac is replaced by a concrete surface, you will be on the old path connecting the Fajã dos Vimes to the Fajã da Fragueira. Even though there is another path there, which goes up the hillside to Portal, this path has better access both for people and goods.

The beginning of the path has a cobbled surface but then turns into a dirt path. You can tell that the lands are an extension of the Fajã dos Vimes, mainly with fruit trees producing figs and loquats and citrus fruits, and vines (both wild and cultivated). The rest are species that are characteristic of the woodland on the cliffsides, where *Erica azorica*, *Pittosporum undulatum* and *Morella faya* predominate. You can also hear the tern, even though you cannot see them. Climb up a little further and you will catch sight of the Fajã da Fragueira, quite close by.

The wide path leads downwards to the valley of the Ribeira Seca do Calhau, a stream where larger rocks have been arranged so that it can be crossed by quad bikes, or, as in the past, by animals or even ox carts. The waterfall dries up during the summer but cascades abundantly during the winter.

Beyond the stream the path rises again. The slope on the right is pure rock, in places, and at others is composed of from landslides that have been compressed naturally or are kept in place by supporting walls. Throughout the trail you are accompanied by views of Pico island and the sound of the sea lapping against the rocks.

You come to the Fajã da Fragueira, which has some buildings, either barns for agriculture or summer houses. The path forks here. Do not go towards the houses or cellars on private land, nor through the gate with a strange counter-weight, bearing the name "Adega do Ferruge". Instead, choose the right turn and climb up as far as the drinking fountain.

The Fajã da Fragueira belongs to the parish of *Ribeira Seca*, and is composed of small terraces, cultivated by the inhabitants of Portal, mainly planted with vines and banana trees but also sweet potato, sweet corn and other vegetables. You will find wood cut into logs to be used for barbecues. The buildings are connected by winding paths and stone steps, adapted to the steep incline. Almost all the buildings are made of stone, with traditional tiled gable roofs with loose stones on top, while only the largest house is partially plastered.

This house, which stands out from the others, belonged to the family of Francisco de Lacerda, the composer and conductor who was born in Ribeira Seca. It was the only two storey house in the fajã but all that remains are the outside wall and the veranda leading to the upper floor. To reach the house where Francisco de Lacerda may have composed some of his works, go down the steps next to the drinking fountain, and after about 10 metres, turn left until you reach the veranda, which is a good vantage point above the fajã.

PR9 SJO Fajã dos Vimes - Fragueira - Portal

Return to the drinking fountain, which feeds a series of small reservoirs along the fajã, and climb on up the path, leaving behind the little Fajã da Fragueira and heading for Portal. On the way up, which is a rather strenuous climb, the path is narrow, where man simply built steps where nature left no space for a path.

Almost at the top of the cliff you will find two little white crosses, close to each other, on the cliffside. The first, placed in a niche, bears the inscription "J.V.C. F em 16-3-1967", presumably marking the spot where J.V.C. passed away. The other cross has neither an inscription nor a niche.

On the clifftop, you will find larger trees, and the path is less steep. Cross another stream and you will come to a gravel path, near the first houses of Portal. Continue onwards, past two fountains, with a tank and arches, until you reach the main road, where the trail ends. On this final stretch, you can take advantage of the sweeping view over the area of Ribeira Seca, the largest island civil parish in Portugal.





FRANCISCO LACERDA (1869-1934)

Was born in the parish of Ribeira Seca. He was a well-known musicologist, composer and conductor, with a remarkable international artistic career. After his father's death, in 1913, and for health reasons, as he had been diagnosed with suspected tuberculosis, he returned to São Jorge, aged 44, and settled in Urzelina, in a house belonging to the family, where he lived and worked. He is said to have spent long periods in the family home in the Fajã da Fragueira. As a child, he certainly used to spend the months of August and September there. However, after his return, I do not think his stays there were quite as frequent or as lengthy as some would have you believe, maybe influenced by his famous phrase "Either Fragueira, or Paris", in the sense of "all or nothing". During those years he collected and studied the traditional music of the Azores and dedicated himself to composition. He returned to Lisbon 8 years later, in 1921, and passed away at the age of 65, the victim of tuberculosis.

TRAILS OF THE AZORES

SÃO JORGE

GR SJO

Great Route of São Jorge

Difficulty: Hard Extension: 41,5 km Time Average: 12:00h Category: Linear



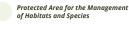




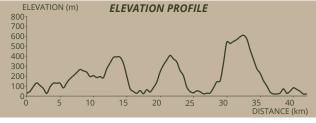




Natural Park of São Jorge







GR SJO Great Route of São Jorge

The Great Route of São Jorge crosses roughly half the Island, going in a straight line from the eastern tip of the Island, at Topo, to the Fajã dos Cubres, on the north coast, and is approximately 42,5 km long.



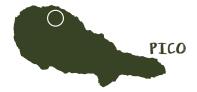
This trail alternates between the plateau on the interior of Island, where the volcanic cones which formed the island were born, and the high cliffs, parts of which collapsed and formed small flat areas at sea level called "fajãs", which are so characteristic of the landscape of São Jorge and have been classified as a UNESCO Biosphere Reserve. When possible, take advantage of the various bathing areas near the trail. You can also stop in the little towns or villages to buy supplies for your walk and to regain your energy.

This great trail is divided into two stages, approximately 26,5 km and 15 km long, respectively. The first stage connects Topo and the Fajã dos Vimes, on the south coast, while the second stage links the Fajã dos Vimes and the Fajã dos Cubres, crossing the Serra do Topo range of hills and going through the famous Fajã de Santo Cristo, known for its unique species of clam, as well as its religious character and its stunningly beautiful landscapes.

As this huge trail involves significant differences in altitude, you should plan the route in accordance with your degree of fitness, interest and availability. There are suitable places where you can sleep overnight between stages (Rural tourism accommodation), as it is forbidden to camp in the wild.



TRAILS OF THE AZORES



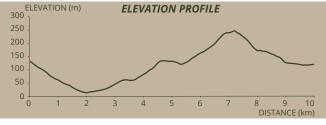
PR1 PIC

Caminhos de Santa Luzia

Difficulty: Medium Extension: 10,5 km Time Average:: 3:00h Category: Linear

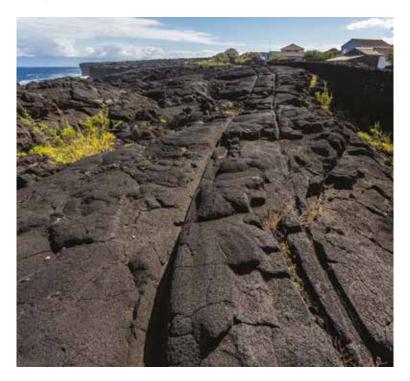






PR1 PIC Caminhos de Santa Luzia

This trail is situated in the civil parish of Santa Luzia. It goes through the *Protected Vineyard Landscape of Pico*, classified as a *World Heritage Site by UNESCO* and as *Protected Landscape of Pico Vineyard Culture - North Zone* by the Regional Government. The objective is to head to Lajido, the place where we can observe the attributes that have justified such acclaim.



Begin at the junction of Rua da Eira with the road, at the place of *Fetais*. Go down this asphalted path, amid agricultural land where pines and various orchards predominate: cherry guava, plum trees, orange trees, loquat trees, vineyards and fig trees. Some ornamental plants like hydrangeas and camellias demarcate and embellish the boundaries of farms and estates.

After descending for 500 metres, leave the path that would have taken you to Lajido do Meio and take a linear but uneven pathway on your right and head to Lajido. Not as useful as it once was, this pathway leads to derelict agricultural buildings. Here and there, wall stones join the rocky ground, with both concealed by pines.

You will soon get to a renovated house with typical stones holding the roof tiles. Here the pathway becomes a wide lapilli path. 250

PR1 PIC Caminhos de Santa Luzia

metres ahead, where the vineyards are well kept, you will find the first houses of Lajido. The quadrangular walls, the so-called corrals (*currais*), protect the vineyards. At one point in time, fungi and other diseases debilitated the vineyards. For this reason, fig trees were planted, protected by half-moon-shaped walls which you will see. The fig brandy is sold to the public but is also used as an additive in the making of some wines.

Cross the asphalt road and continue walking on the old path until you reach the coastline. Please mark your bearings (let's call it Point A) since you will have to return here later. Turn left for it is time to visit Lajido, an old residential and agricultural centre with well preserved and properly rehabilitated buildings.

In addition to the recent Interpretation Centre, you will find in Lajido houses and wine cellars, with their respective presses, alembics, warehouses, fig-fermentation tanks, the Solar dos Salgueiros, wells (*Poços de Maré*), the Chapel of Nossa Senhora da Pureza and other architectonic structures that have been rehabilitated by the Regional Secretariat for the Environment. When you finish visiting Lajido, turn back to Point A. Next to the path that brought you to Lajido, you will find an old pathway that connects Lajido/Arcos to Santa Luzia. You should walk 2250 metres on this pathway, heading toward the regional road.



PROTECTED VINEYARD LANDSCAPE

The "Verdelho" wine of Pico was world renowned for more than two centuries, especially in England. America and Russia, where it was served at the tables of the Czars. From this intense economic activity and from an ingenious human adaptation to the environment, an important historical and cultural legacy was bequeathed to future generations, such as mansions, wineries, warehouses, wine-barrel-rollers, ports, convent-houses, chapels and other architectonic structures. In 1996, 987 hectares of Pico vineyards, surrounded by a 1924-hectare buffer area, were declared a Protected Landscape of Regional Interest (PPIRCVIO) by the Regional Government of the Azores. Later, some of the areas being cultivated, rehabilitated or even abandoned that evinced the diversity of buildings and productive structures and their perfect fit to the rugged terrain, soil and climatic conditions, were submitted to the evaluation of UNESCO. UNESCO's approval of the vineyards of Pico as a World Heritage Site was attributed in July 2004.

PR1 PIC Caminhos de Santa Luzia

Although more evident in some places, it is possible to observe almost everywhere the trails left on the basalt by bullock carts (often pulled by cows) that transported wine. The continuous passing of these carts for many decades inscribed on the rock a message regarding the hard times lived back then: A hard life...harder than a rock.

Originating between the 17th and the 18th centuries, this path (parallel or underneath the present one) was always wide and its pavement was made out of stone or of small slabs. It is flanked by high stone walls, punctuated by ruins of large gates and by some constructions. An attentive observer will be astonished when s/he sees how some of the obstacles in this path were transposed in the past.

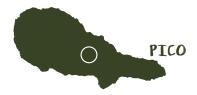
You will pass near the ruins of Forno dos Frades, with its imposing stone chimney. Some say that it was used for drying figs, a fruit that is intimately related to the vineyards. Others claim that it was a part of a building belonging to Franciscans that produced wine.

A new junction...continue walking up. A few more *relheiras* (indentations on rock) and you will get to a new fork: keep going a few metres until you reach the asphalted Rua do Lajido de Baixo. Go straight ahead until you get to the beginning of Rua dos Arcos. Turn right and go up the lapilli pathway. In the final straight part, the pathway becomes steeper and asphalted, leaving the regional road, a situation similar to that found at the beginning of the trail.

Continue walking left until you reach the church. Go around it, walking up Rua do Outeiro, behind the church. At the beginning of the street, you shall see orchards with yam, corn and some fruit trees: fig trees, apple trees and others of different species. When you pass by the cemetery, continue walking up. In the woods that begin to predominate on the landscape, you will find Pittosporum undulatum, Morella faya and Picconia azorica. You will find another path on your left, next to which there is a house that you will pass by when returning. Meanwhile, remain on the trail, walking up to the next fork. Turn left there and walk for 400 metres and turn left again at the next junction and walk down. The grassed pathway will lead you to a lapilli path. Some metres later, on your right, you will see an asphalt road. Turn left into what looks like a very old pathway, judging by the stone houses and ruins found therein. You will pass underneath a reservoir and continue until you get to the old house and the annexe mentioned before, next to a plague that indicates "Rua do Camilo". Walk down the lapilli pathway next to the annexe, which becomes asphalted before you get to an automotive repair garage and continue until you reach the road. Take a left and walk toward the church. where you shall end this trail.

We ask hikers not to pick any fruits whilst on this trail. If you see the owner, ask for permission and you will certainly be recompensed.

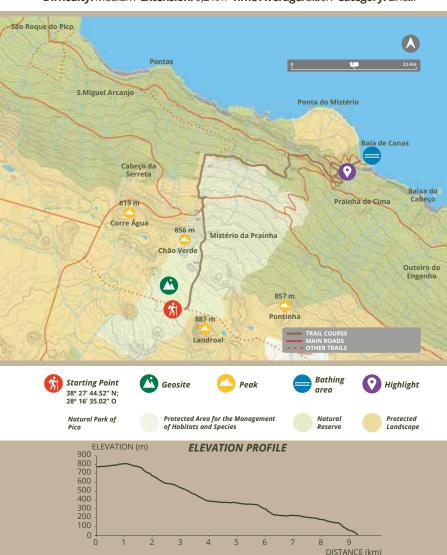
TRAILS OF THE AZORES



PR2 PIC

Caminhos dos Burros

Difficulty: Medium Extension: 9,2 km Time Average: 3:30h Category: Linear



PR2 PIC Caminho dos Burros

This trail begins in the plateau of the island, leading you in a descent toward the coastline. Therefore, we are talking about a variation of 800 to 0 metres of altitude (sea level). The singularity of this trail results from this fact: you will visit several habitats, explore diverse geological formations and species of vegetation, as well as different human uses of the land as you hike in the *Mistério da Prainha Natural Reserve*.

Caminho dos Burros (Donkeys' Path) is an old pathway, used by men and animals to travel to and from Vila das Lajes and Vila de São Roque. The old pathway is still perceptible and today we are walking where the ancients walked. You begin the trail by crossing a gate that blocks the mountain pathway from the easement path that you will soon take. Before you get to the small peak ahead of you, pay attention for you will have to leave it and take the shortcut made out of slabs on your right, walking along the vegetation that looks like a scar on the mountain. You will pass near the volcanic cones that originated the Mistério da Prainha between 1562-64, historically the most prolonged eruption since the settlement of the Azores. You will walk on this lava for some time.

We are in the mountain habitat, where exposed rocks are still undergoing a process of colonisation, constantly harassed by outgrowths of the surrounding flora. It is a very rich area, covered by a low mountain forest, a mixture of Juniperus brevifolia, Vaccinium cylindraceum, Viburnum treleasei, Ilex perado ssp. azorica, Erica azorica, Myrsine africana and Pericallis malvifolia, on top of which grow Hedera azorica and Arceuthobium azoricum. Beneath we find Tolpis azorica, Dryopteris azorica, Hypericum foliosum, the endemic orchid Platanthera micrantha and Festuca jubata. You will occasionally hear finches and blackbirds tweeting.

Shortly the trail, made out of slabs and stones, will take you to the end of this sort of uneven flat terrain: ahead you will see the long island of São Jorge and a sea channel, with its glassy waters concealing sea giants. It is a sublime landscape, period! Unforgettable.

As you begin your descent, an unexpected explosion of the endemic *Euphorbia stygiana*. This rare endemic plant is surprisingly abundant here

We now find ourselves in the lane that descends the hillside of the island. The habitat changes, so do the species. The cloud forest is now replaced by fragments of *Laurissilva* as other shrubs become scarcer and weaker. We can see *Frangula azorica*, *Laurus azorica*, the endemic *Rubus hochstetterorum*, *Sphagnum* and various ferns.

You, as I, will think it is strange to find apple trees in the middle of the lane. There is a reason for it. It is said that apple trees were planted there many years ago to satisfy the needs of those that

PR2 PIC Caminho dos Burros

took the Caminho dos Burros pathway.

The first clearing enables you to see a pathway. On your left, by the sea, you will find the village of São Roque. The descent becomes steeper and pastures appear on the hillside, compartmentalized by shrubs. The birds tweet more intensely. You have reached the asphalt, turn right. Ahead, between two curves, a new red lapilli path appears. The ground is slippery, so walk carefully. The novelties here are the *Cryptomeria japonica* trees and acacia trees with a mixture of *Morella faya*, *Pittosporum undulatum* and *Hedychium gardneranum*. Do note that you are at the boundary between the lavas of Mistério da Prainha, on your right, and the older terrain on your left. In these geological frontiers, depressions in the terrain frequently become creeks.

At the crossing with the path known as "Meia Encosta", turn right. Some ferns appear as well as common wood pigeons (*Columba palumbus*, a protected subspecies that has become a plague) and rabbits.

You will get to a fork where you will have to make a choice: (1) descend on the left, toward S. Miguel Arcanjo or; (2) go straight ahead and end this trail at Baía de Canas. I found the second alternative far more interesting. I recommend it for this reason.

(1) In case you chose to head to S. Miguel Arcanjo, you will have to walk a 3 km path, straight ahead, without taking any detours you will find. Initially, it is quite steep with various curves, becoming flatter later. The vegetation is similar to what you have seen until now, notably the *Ilex perado ssp. azorica*, *Picconia azorica* and the *Smilax divaricata* that go up the trees. You can observe the village of S. Roque from different points and the extended island of S. Jorge. The pathway, now called *Rua do Cabeço*, is asphalted on some parts, passing by a reservoir and soon reaches the houses, leaving the regional road at the place of S. Miguel Arcanjo, at the square wherein you find the chapel with that saint's name, a Holy Spirit "theatre", a bandstand and a café/restaurant.



BAÍA DE CANAS

It is a bay that was integrated on the *Protected Landscape of Pico Vineyard Culture*. This residential area was established at the beginning of the 17th century, when vine cultivation began. This landscape comprises some reconstructed wineries, corrals and stone pathways. Additionally, one can also visit a heritage site, Convento dos Frades, a small convent that includes the Chapel of Boa Viagem or Chapel of Dores and the adjoining residential area. This area was occasionally frequented by monks at the time of harvest.

PR2 PIC Caminhos dos Burros

(2) If you chose to go to *Baía de Canas*, continue walking straight ahead in this smooth path in which the only noise you can hear is that of your boots crushing the lapilli rocks or nothing at all. Further ahead you will find a signpost to exit this path that is flanked by big ferns (*Diplazium caudatum*) and enter a wood of acacia trees. In this dense wood, trees die standing up and then fall into a medley of wood, parts of which are still decomposing. Here the most intense sounds you will hear are those of pigeons taking off. Then more pine trees will appear with their fallen needles colouring the ground green. You will reach the regional road, cross it and continue walking the path that will access the *Prainha Forest Park*.

This recreational forest park is not only a pleasant place to be but is also rich in terms of the ethnographic representations of the traditional activities, uses and costumes of the people of this island. At the very beginning, next to the "adega" (winery), you will find a belvedere that enables you to see the large lava platform that was formed at Cabeços do Mistério, at exactly where you began walking this trail. To the right of this lava delta, where noisy seagulls nest, you can enjoy your first view of Baía de Canas, with its small beach, where rolled rocks stubbornly conceal parts of the beach. Above the belvedere, you will find a picnic area, with grills, WC facilities and a winery. Walk down, passing by a zone of endemic plants duly identified. You will pass by a terrace and find a typical house with a manual/horse mill and a redoubt. You will find recreational facilities, such as a playground, bucks enclosed by a fence and a camping site. The geobotanical landscape is rich, composed of red lava flows and many arboreal exemplars that provide a pleasant shade.

Cross the main pathway that leads to the Baía das Canas and continue walking on the other side, on a path that is perfumed and closed off by a wall of rose plants. The path curves and, further down, a signpost indicates where to go to find the pathway that shall lead you to the sea. When you enter, turn immediately to the left, do not go straight ahead. The uneven ground and the stone walls reveal the antiquity of this shortcut that is concealed by *Pittosporum undulatum*. In the less steep final phase, the high walls that flank this pathway with a primitive ground, with slabs neatly placed in the middle of the footpath to facilitate the walk, evince the importance of this path to the local population. On certain seasons, this was the only access to Baía de Canas.

You will reach the first houses. Go down to the beach by descending an old path: a peculiar staircase, made with stones retrieved from the beach, a solution that is most frequent on this island, a fact that denotes the ingenuity and skill of those that built it. When by the sea, enjoy the beach and relax whilst swimming in the waters of the channel.

TRAILS OF THE AZORES



PR3 PIC

Porto Calhau - Manhenha, Ponta da Ilha

Difficulty: Hard Extension: 7 km Time Average: 3:00h Category: Linear



DISTANCE (km)

PR3 PIC Porto do Calhau - Manhenha, Ponta da Ilha

This trail is situated between two ports on the east coast of Pico, where the island begins and where the sun first rises. On top of a lava spill, the place of Calhau, the main port of the village of Piedade. On the coast, low and not particularly beautiful, there are atypical plants growing in the cliffs because of the houses above.



The name "Calhau" certainly originated in the rocks (calhaus) that were commonly found on the rocky beach. In the square, you will find the *Cultural and Recreational Centre of Calhau*, with its bar next to it, where you can obtain supplies for the hard hike.

You are going up the cliff. Head to the road, passing by some old rustic houses that have been rehabilitated and newer ones. The signposts of the trail lead to a path above the rock. The rocks brought by the sea were taken from the beach and used in various ways, in the decoration of facades, in the making of statues and stairs to access houses (combining or carving stones) and in other, more bizarre, manners.

We pass by the small *Chapel of Nossa Senhora de Cima da Rocha*, built in 1854. Leave the asphalt and take the lapilli path. You will pass near the end of Canada do Morgado but continue walking along the coastline.

PR3 PIC Porto do Calhau - Manhenha, Ponta da Ilha

Do notice some well-rehabilitated houses in which not even the cement that binds the stones is distasteful.

We are now in the *Protected Landscape Area of Vineyard Culture - Ponta da Ilha*. Here the vegetation is repetitive. Amidst the vineyard corrals, one finds *Picconia azorica* standing out in the middle of common species. The exemplars of *Canna indica* and *Lavatera arborea*, partially camouflaged by the dust from the road, do nonetheless preserve their intense colours.

The rurality of some buildings is not only evident in the old architecture of the houses, but also by the use of its redoubts, for the raising of cattle or the cultivation of orchards with traditional crops. It is possible to observe on the walls the application of elements that were carried by the ocean: buoys that the sea deposits on the beach and sea shells commonly known as "búzios."

The trimmed coastline is formed only by flows of black lava, far more recent than those that formed the island of São Jorge right in front. Even though these flows occurred a long time before the settlement of the island, these flows do not appear to be as old as they are. You arrive at the square Cais do Galego. Continue walking on the cliff, on shortcuts or on stone pathways where bull carts once passed. *Juncus acutus, Erica azorica, Crithmum maritimum* and grain meads comprise the vegetation that sparsely covers the rocks. After passing by "Adega da Avó," one of the many constructions originally intended as a vineyard shed, you will see Castelete. As you can see, this elevation by the sea is a small volcano that resulted from an older eruption and which was later surrounded by lava from more recent eruptions. *Euphorbia azorica, Silene maritima, Cyrtomium falcatum, Asplenium marinum,* some *Solidago sempervirens, Morella faya* and vineyard are some of the most frequent species found here.

Ahead the trail ends and the signposts point to the black rocks, colonized only by *Spergularia azorica* and *Polypodium maritimum* that grow in small deposits of sand in the crevices, lichens and little else. Now the



PONTA DA ILHA LIGHTHOUSE

It is located in the easternmost part of the island of Pico. The lighthouse started operating on the 21 July 1946. The tower, white and prismatic, is 19 metres-high, topped with a red lantern, 29 metres above sea level. The tower is integrated into the main building, with room for annexes. In 1959 the lighthouse was connected by road to the village of Manhenha.

PR3 PIC Porto do Calhau - Manhenha, Ponta da Ilha

trail becomes harder. Be very careful and walk calmly. Down there, in the seashore, crabs rest in the sun over beds of algae that are attached to the stones. Next, while heading to Castelete, we begin hearing the tweets of garajaus (terns). Walking over the rocks, some are flat, others broken and pointy, you should choose the easiest trajectory and find the trail's signposts.

Garajaus are migratory birds that come to the Azores to nest in coastal habitats from April until August. Two species can be found in the Azores: the common tern (Sterna hirundo) and the roseate tern (Sterna dougallii), which, unlike the first, has a black beak at the beginning of the reproductive season. Their external morphology is well adapted to an active way of life and to rapid flights. Medium-sized, with around 25 cm of length and long wings and pointy beaks, they feed on fish that they catch in dives into the ocean. It is common to see them arrive on their nests with fish on their beaks. These are gregarious birds that form large, noisy, and active communities. They nest in inaccessible rocky places, a crevice is sufficient, where they lay 3 to 4 eggs. If the birds experience external disturbances, they may abandon the nest. For this reason, behaviours and actions that might negatively impact the nesting colony ought to be minimised.

With the sea nearby it is not surprising that we see shells of the limpets on the rocks, discoloured by the sun. In some places, it is possible for Pico islanders to reach the sea and catch limpets or crabs. On top of the lava headland, fish scales and small holes the size of a hand used to prepare bait, are proof that the islanders use this spot for fishing. Sometimes the sea carves strange forms in the lava flows, such as the natural arch that we see, opened by the violence of the waves that, just ahead, left large rocks on the seashore. We can also see small alveolus carved into the stone as a consequence of differentiated erosion and bits of wood washed over and gnawed by the sea in its wanderings.

The trail now leads you away from the lava, to your right, toward a house above, next to which you will find a lapilli path that you should follow. As you move away from the sea you are entering the zone of Engrade. Turn left at the next junction while you observe the constructions that some residents make on top of the walls.

You will reach another fork. Turn left heading to *Baía do Engrade*. Walk near the coast on a path that may require extra caution. In this last phase of the trail, whilst heading toward *Ponta da Ilha Lightouse*, you must follow the signposts since you will be passing close to a colony of terns. Soon you will see the lighthouse. Pass near the annexes and, if you see the lighthouse keeper, ask him to go up to the lighthouse.

Walking on the asphalted road will quickly get you to Manhenha, where the trail ends. If you wish to replenish energies, ask for the nearby Ponta da Ilha Restaurant where you will be able to have a good meal or simply rest whilst you wait for transportation.

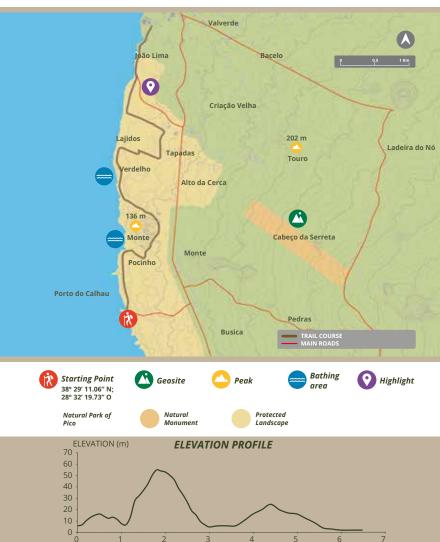
TRAILS OF THE AZORES



PR5 PIC

Vinhas da Criação Velha

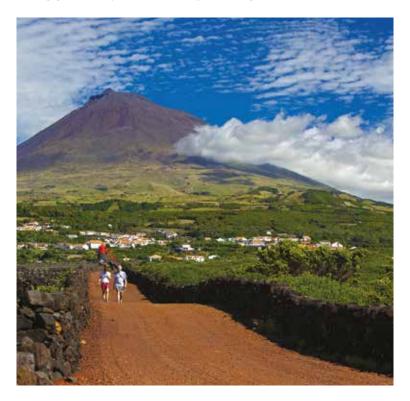
Difficulty: Easy Extension: 6,5 km Time Average: 2:00h Category: Linear



DISTANCE (km)

PR5 PIC Vinhas da Criação Velha

Go to Porto do Calhau in the locality of Monte, where you will find a plaque placed at the beginning of the trail, next to 4 small houses with fishing gear. This port was used by the villagers of Candelária and São



Mateus.

Boats that crossed the channel departed and arrived here, transporting passengers and merchandise between this island and Faial. It was also a fishing port for more than ten boats that supplied the neighbouring villages and the local factories with fish. In the wintertime, the port was occasionally used as an alternative port for the boats that cross the channel, when the port of Madalena was inaccessible. At the end of the 1950s, construction work was undertaken, a new dock and protective walls were built and the ramp was reinforced with slabs. Looking at the sea, turn right and walk in the coastline.

You will pass by a landlord's house in front of which you will find a well (poço de maré). You will find more throughout the trail. These wells were often the only means of obtaining drinkable water in the summertime. Buckets attached to ropes would be used to extract

PR5 PIC Vinhas da Criação Velha

water from the aquifers. Usually, these aquifers were located on the coastline, close to the seashore, and are made visible by the low tide, at which time the spring water has less sea water and can, therefore, be drinkable.

This trail is quite old as evinced by the ruins of the seaside walls that demarcate the boundaries of the vineyards and the public pathways. As in other similar places, when the pathways were improved the surrounding land was sought for urban construction. Despite other limitations, new buildings have been erected.

Throughout this trail, you may appreciate the simple walls that were constructed by hand with rocks from the terrain. With these rocks, Pico islanders constructed corrals, small parcels with linear angles, with an area less than 10 square metres, built to protect the vineyards from the sea and the strong winds.

Continue walking toward *Cabeço do Pé do Monte*, an elevation that is straight ahead. Where the ridge touches the sea, a small bay was formed, Pocinho. As time passed, this area became a pleasant spot to spend a few hours resting, swimming or playing football. Here you can also find a rural tourism unit of great quality.

Walk down to Pocinho and then go up a path that will enable you to go around Cabeço do Pé do Monte. On the other side of the walls, there are vineyards, many of which have been invaded by *Pittosporum undula*-



PROTECTED LANDSCAPE AREA OF VINEYARD CULTURE - WEST ZONE

This area is, undoubtedly, one of the most expressive landscapes that this island offers to a visitor. Vineyards have been abundant on this island for a long time. Until the middle of the 19th century, the wine grape varieties cultivated in the region were European, one of which, "Verdelho," is consensually regarded by historians as the most significant on the island. At the same time, Oidium tuckeri became a problem, followed by Phylloxera, both causing a decline in wine production. With the introduction of American grape varieties, used as a rootstock for Verdelho, it was possible to maintain and increase production again. Some picturesque signalling plaques indicate what you should do: go up amid the vineyards and find a mill. Small constructions, dispersed throughout, are used as storage facilities and, when necessary, as shelters. What is lacking in terms of vineyard architecture is more than compensated by these buildings and stone walls.

PR5 PIC Vinhas da Criação Velha

tum, Erica azorica and Morella faya. You will reach a swimming area with a small semi-natural lagoon, well-adapted for swimming by the Parish Council of Criação Velha, which also built the annexe used by swimmers.

Resume your walk on the coastline. Lush green intertwines with the black of the rocks. Heat emanates from the big basaltic slabs and from the fragmented stone blocks underneath. There are no trees planted by men with the exception of willow trees and metrosideros, tree species that easily endure the sun and the salt from the sea. As to birds...they are waiting for the grapes to grow.

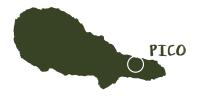
We are in the *Protected Landscape Area of Vineyard Culture - West Zone*, the area that best represents the landscape of the island of Pico.

The pathway becomes a lane where many men walked, carrying on their backs many kilos of Verdelho grapes. You will get to a wider path, Canada do Monte, probably the oldest path connecting the village of *Criação Velha* to *Monte*. Turn left. At the entrance of the corrals, you will see interesting portals made out of staves from old wine barrels. I would like to be able to say that once these reutilized parts of old wine barrels contained the wine that reached the tables of the Russian Czars but this is unlikely. When you reach the asphalt, next to some houses, you should turn left and continue walking on the path Canada do Monte, heading toward *Moinho do Frade*, which stands out on the landscape. This gyrating wooden windmill rests on a stone base. It was rehabilitated in 2003/04. More than a landmark, it is also an excellent belvedere. Go up the stairs and, if the door is open, learn a bit more about the functioning of these flour-making machines.

Resume your walk toward the margins, turning right. You will be impressed by the blocks of stone that the sea rolled and placed on top of the headland, waiting for a new wave to move them again. Ahead, after the green maritime meadows filled with *Spartina versicolor*, you will reach an asphalted lane, located in front of Solar dos Saldanhas. This large house served both as a residence and as a winery. Built in the 18th century, this is a large and beautiful building, especially the centre of its facade and the main portal.

Take the coastal path on your left, heading toward *Areia Larga*, where several large houses were built during the 18th and 19th centuries. These old large houses were owned by wealthy families from Pico and Faial islands that were involved in wine trading, especially "Verdelho" wine, who habitually come here on their summer holidays. Soon you will get to a small cove, where you can swim in the ocean and visit one of the oldest ports on the island, a port that replaced the port of Madalena when the sea was rough there. On this Porto da Areia Larga, in addition to the beautiful views it offers, you can also look at the unusual port crane that is a landmark of this place. You may also enjoy a delicious meal at the restaurant "*Ancoradouro*."

TRAILS OF THE AZORES



PR7 PIC

Caminhos das Voltas

Difficulty: Easy Extension: 6,3 km Time Average: 2:00h Category: Linear



PR7 PIC Caminho das Voltas

Anyone taking the regional road will end up easily finding Miradouro da Terra Alta, located between two metrosideros, guardians of this place. After the eleven stairs of the belvedere, there is a cemented terrace that is blocked to the public for safety reasons. You can enjoy a limited view of the densely vegetated high cliff that descends toward the sea. The island of São Jorge is prominent in the background as is the channel that connects it to this island, a recurring landscape in many spots of this trail.



When you leave the belvedere, turn right, pass by the improvised parking space and continue walking for a few more metres until you find a wide lane that descends. This is the beginning of *Caminho das Voltas*. After the first straight, the path begins to zigzag, with its curves softened by stairs. The ground is the rock itself or stone slabs. Sometimes it is covered by a carpet of leaves and land.

We have been told that this path was used, by the population of Santo Amaro and the vicinity, to access the upper part of the island. There are no vestiges of the passage of any bullock carts, except the considerable width of the occasionally steep path. However, it was perfect for leading cattle to pasture or for transporting wood on a donkey.

After crossing the first valley, cryptomerias begin to appear, covering the ground with their foliage. Then, when the path is flatter, laurel tree leaves perform the same role. You will soon get to the second valley, deeper,

PR7 PIC Caminho das Voltas

where one finds a waterfall in rainy days.

Under the constant cover of vegetation, this is a fresh and shady trail where mushrooms and mosses find auspicious conditions to grow. Some *llex perado ssp. Azorica* and *Picconia azorica* intrude in a forest with many ferns, the most common being *Doodia caudata* and *Adiantum hispidulum*.

When you get to the first of several chestnut trees, you can enjoy a beautiful rural landscape that seems to kiss the sea. It crosses the stream *Ribeira of Salto*. From above, you can see the ruins of a typical two-floor house and you enter a red lapilli road. When you get to the asphalt, you will find the first houses of Terra Alta and the beginning of public lighting. The typical nature of the houses is accentuated by the stones on the roofs of the houses, stopping the roof tiles from flying off and landing on top of the yams that grow in nearby gardens.

When you reach the first fork, do not go up. Continue straight ahead, walking for 800 metres, passing by the house of an artisan that makes rattan baskets. Soon you will find, on your left, a more imposing lightpost with a transformer. On your right, a secondary road, also asphalted: walk it for only 10 metres and then descend a path that will appear on your right. You will pass by a stone house, forgotten amid the vegetation, that used to be a butter factory. The descent continues with its steep turns, between the sweet pittosporums that cover the hillside, until the path Debaixo da Rocha, located in a small agglomeration of picturesque summer houses, a place known as *O Canto* (the corner).



MUSEU MARÍTIMO DE CONSTRUÇÃO NAVAL (MARITIME AND NAVAL CONSTRUCTION MUSEUM)

Is a tribute to the strong and singular tradition of naval construction that subsists at Santo Amaro. José da Silva Melo, after spending a life in the Azorean diaspora working in naval construction, returned home and decide to pay homage to his father and to his masterly craftsmanship. The memory of this important craft in the traditional economy of Santo Amaro was thus preserved. Some of the boats in this museum were built out of pinewood and cedar in the United States. Builders resorted to paper models, photographs and to the prodigious memory of José Melo. Other boasts were constructed at Santo Amaro with pittosporum-tree (Pittosporum undulatum) and laurel-tree (Laurus azorica). The museum is also a repository of tools and, interestingly, of ground rails. Originally this area was used to build boats outside but then it became a workshop where machines and tools were kept. Now it is a museum.

PR7 PIC Caminho das Voltas

Continue descending, now on the road, until you find a narrow lane on your right side, which you will have to walk until you find a stream that is usually dry. This lane will take you to the rocky Baía do Canto. Take a left, over the rocks. Soon you will see a seashore water spring and a small belvedere, built with rocks rolled in by the sea. Return on the asphalted path, walking straight ahead. This is a zone of vineyards, enclosed in their stone corrals. This is Canto, a place of wineries and summer holidays, much appreciated during the summer for its proximity to the sea, where you can swim and eat snacks at the end of the afternoon.

You will get to a road junction and you should turn right into Rua do Caisinho, a road that shall take you to a place with the same name, used as a swimming area. Once this was the first naval construction site on Pico island.

Leave behind the lapilli square where you started and continue walking on your left, in a shortcut by the sea. Without realizing, while you appreciate the *Azorinas, Festucas, Crithmum maritimum* and *Ericas* that have colonized the black rock, you will get to the Parque da Furada: a picnic park with the necessary amenities. Leave the park and go up Caminho da Furada, turning right at the first junction and continue walking until you find Rua Amaro Justino de Azevedo Gomes, where you should take a right and descend right up to a white wall that separates the sea rocks from the road and that will accompany you until the end of this trail.

On this pathway, 60 metres before entering the church square, on your left you will find the *Escola Regional de Artesanato de Santo Amaro* (Regional Crafts School of Santo Amaro). Do visit the museum on the first floor of this rustic house built in the 19th century.

You will get to the Church of Santo Amaro, around which there is the Holy Spirit "império", a parish centre with a large room, a cemetery and the Sociedade Filármonica Recreio Santamarense (Santo Amaro Philarmonic Society), founded in 1946.

Leave the square and continue walking toward the port. From July until September you may also visit "A Loja", a painter's workshop where António Duarte Pimentel, a son of the island-mountain who lives in continental Portugal, expresses on the canvases his artistic talent and creativity. Kind as any *Picaroto* (Pico islander), he will be happy to show you his oeuvre, which you may also purchase. Your voyage is about to end but there is one place that you must visit, the *Maritime and Naval Construction Museum*, a tribute to the tradition of naval construction that persists in Santo Amaro. The museum opened its doors to the public in 2004 but is usually open every day. Entry is free but you may contribute to its preservation by acquiring one of the craft works on display or by making a donation when you leave.

The trail ends near the port with a ramp that was used to carry whaling and fishing boats to the sea and to push the whales inland, where they would be melted. These boats are an integral part of the maritime history of the archipelago of the Azores.

TRAILS OF THE AZORES



PRC8 PIC

Ladeira dos Moinhos

Difficulty: Easy **Extension:** 3,4 km **Time Average:** 1:15h **Category:** Circular

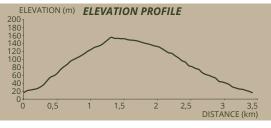






Natural Park of Pico





PRC8 PIC Ladeira dos Moinhos

This trail is in effect a short route intended to divulge the physical space where the people of this village settled and some details of the rural activities of their existence as a community, a purpose that it fulfils fully.



Begin this trail at the church Matriz de São Roque, built in 1714. An imposing church in the context of the island in which it was built, with a superb interior, with paintings and golden carved wood in the main chapel, the lateral chapels in the shell that is still used for baptisms and a superb shelf for choir and liturgical books (*facistol*), with magnificent incrustations, the richest I have ever seen. If it is open do not miss the opportunity to visit this church, certainly one of the most valuable religious heritage sites that were erected on this island.

Leave the church square and head east on Rua das Dores, toward the bridge in cobbled stone that you see ahead of you, where this trail officially begins. Here the waters of the stream of Dentro merge with the waters of one of its tributaries. The bridge has a central pillar, each line of water passes underneath its own arch, joining downstream. After the bridge turn right, walk up a few metres on the asphalt and soon thereafter turn right again into *Ladeira dos Moinhos*, which goes up, along with the side of the stream.

PRC8 PIC Ladeira dos Moinhos

In this steep pathway, in which one still finds the original cobble stones, doing justice to its name, there was a set of 5 watermills that worked as a set. However, we can only observe the ruins of 3 watermills, all of which on the left side of the slope, just after the conduit that lead water underneath to the grinding wheels. If you enter through an access on your left, on the steepest part of the pathway, you may visit the ruins of one of these. Little is left and we are not even able to discern which grains did each wheel grind. Maybe there were some for grinding corn and others for wheat since, after all, the grinding wheels differed in accordance with the grain to be triturated. Almost at the end of this path, you may see Paciência windmill, where the building was rehabilitated but probably the windmill gears were not.

Already on the regional road, make a small detour to the bridge to see the village of São Roque, go back and walk up the rudimentary pathway beside a large cistern: Whale water deposit, which would store this liquid that was essential to the functioning of the factory that in the dock (where this trail will end) transformed the sperm-whale in several commercial products.

As you ascend along a stream it is possible to see the small parcels of land that are occupied by pastures or corn (that habitually rotate on the same piece of land) that today still provide economic benefits. You will get to a municipal path that you should cross and keep going up a steep path with some concrete on the ground. You will notice a circular structure on the other side of the stream. Make a small detour and go up this old threshing-floor in which grains and leguminous plants were dried and threshed and see if the views please you. Back on the pathway, continue walking up until you find a fork: take a left, where the passage is shadier and narrower. This path to the high pastures is known as Caminho do Engenho.



WATERMILLS

Became popular in almost all islands of the Azores where settlers discovered streams with sufficient water (a situation that has changed) to ensure their functioning for at least a part of the year. Controlling water flows and the channelling of the water that supplied the watermills were made possible by a simple system of dams and conduits, habitually made out of stone. There were two possible systems to move the gears of the windmills and the grinding wheels: the water either poured onto vertically (azenha) or horizontally (rodízios) placed wooden wheels. The gears would make the upper grinding wheel (andadeira) rotate, grinding the grains that would fall between the moving upper wheel and the unmoving lower wheel. The harvest of grains (principally wheat and corn) coincided with the arrival of the rain. Then, streams like the one you will be visiting had a sufficiently strong water flow to function properly. Some of these watermills were owned by several persons (local farmers) that arranged amongst them the schedule that determined when each would use the watermill.

PRC8 PIC Ladeira dos Moinhos

Leave the path halfway on the hillside, where you should turn right, heading toward the noise and smoke of the Pico Thermoelectric Plant that provides energy to the whole island. The many *Fringilla coelebs* that are flying around here are undisturbed. 700 metres ahead this pathway is crossed by a secondary path that goes along one of the sides of *Laje's stream* to those that want to walk up or down, as in our case. This the edges of this torrential stream are a perfect habitat for a lot of robust exemplars of *Picconia azorica*, an endemic tree that in the past occupied significant parts of these islands at these altitudes. Cleared land, now used for agriculture, progressively eliminated some of the agglomeration of *Picconia azorica*. An edge of a stream is a perfect refuge that has subsisted.

Further down you will find, on your left, another watermill. Descend the stone stairs for a brief visit. Although it has not been rehabilitated, this watermill is still in a reasonable state of conservation and its fundamental gears are still in their correct places: on the upper floor, the grinding wheels and the mower and, if you look underneath, the wooden horizontal grinding wheel.

When you get to the asphalt, cross the bridge and turn immediately to the right, still descending, following the edge of the stream and the riverbed. On the other side of the regional road, you will find the continuation of this pathway that becomes a narrower lane.

You will get to a secondary path: turn left and head to the stream's bed. Here you will find a descent that accompanies the stream up to the bridge where you began the trail. If by chance you have to abandon this shortcut, return to it as soon as you can. Now it is only a matter of walking the last metres toward the square of Igreja Matriz.



TRAILS OF THE AZORES



PRC9 PIC

Prainha do Norte

Difficulty: Easy Extension: 8 km Time Average: 2:30h Category: Circular



PRC9 PIC Prainha do Norte

Begin at Freguesia da Prainha, in the square Dr. José Machado Serpa, a local notable, whose name replaced the popularly known Largo do Império at the heart of this village, where most social facilities are located.



We have before us the Church Nossa Senhora da Ajuda, the Holy Spirit "Império", the Parish Council, the Filarmónica União Prainhense (União Prainhense Philharmonic), with space for large social events, the bandstand and shops. The architectonic milieu should be highlighted, where we can also observe an uncommon layout (18th century) that suggests that this is an area inhabited by wealthy upper-class families. Prainha is one of the oldest settlements of Pico and was the second that was built on the porthern coast of the island.

Leave Largo do Império and take Rua do Caminho Novo which, as the name suggests, consists of new houses. Walk for 650 metres, passing by a garage and iron works. You will find an asphalted path on your right. Walk it for only 20 metres and then take the old pathway on your left. Ahead of you, a tunnel that passes underneath the regional road that connects the two trails of this old path. You may go through it but if the fact that the final part of this passage is only 1 metre-high, and that scares you then you may take the narrow upward path, beside the

PRC9 PIC Prainha do Norte

tunnel, that will take you to the regional road. Cross it, next to the road marker of kilometre 33 and continue going up this old path. At the first fork, turn left, walk over a stone path. At the next fork, go straight ahead.

On your way, you have probably seen banana-trees, yams, cattley guavas, citrus fruits and other species found in tropical climates. You begin to see a haystack, closely guarded by a large *llex perado ssp. azorica* and an elegant *Morella faya*, which you may visit. Next, to the water tank ahead of you, you can look at Prainha do Norte, where we highlight the imposing church and the agricultural fields. Return to the lane and make the 90-degree curve, passing beneath chestnut trees, walking straight ahead, ignoring the paths on your right. Ahead you must turn left and pass beneath a large oak tree, an uncommon species in most of the islands of the Azores. Initiate the descent near the stream Nossa Senhora, on your right side. Cross the riverbed and now you have reached the oldest residential area of the village, built at the end of the 17th century.

At least two stone bridges deserve your attention. One with a central pillar, made with large slabs that constitute the two arches beneath which the water passes. The other bridge is a bit lower, with a domed-arch made with loose stone, provides a shelter to bats whose strident squeaks can be heard. Two different solutions and architectonic constructions that "have seen" several generations pass underneath on the way to the comfort that the old stone houses offered. Regrettably, these century-old bridges are the heritage sites most often neglected or despised in the Azores. Fortunately, it is not the case here since the company Adegas do Pico took it upon itself to rehabilitate the four old houses and transform them into tourism units, to which were attributed interesting names that are inscribed on the plagues near the regional road. Cross the road and descend the street Rua Ribeira da Nossa Senhora, along with the stream. However, after descending for 250 metres, move away from the stream and enter Rua do Morro on your right, until you find a signpost indicating "Praia," "Bar de Praia" next to some houses. Soon thereafter you will find the street Rua do Poço da Areia, which you should descend until Canto da Areia. Next, to a small niche of houses, this place's name was derived from the small cove that is delimited by two streams that end here. The sand is mixed with gravel on the beach, delighting those that come here to swim. Despite the fact that the beach is small and the sand a bit too thick, it is one of the few swimming areas of the island of Pico with some sand. It is very sought-after by the local population. It was rehabilitated and now offers sanitary facilities and a beach bar.

Advance a few metres on the road along the beach, heading toward Ponta da Rocha, and you shall find *Casa do Fio*: a small construction, no more than 2 X 2 metres, one door and an interesting dome roof, extra-curved, with a stone pinnacle on top. This was a telegraph station connected by submarine cables, built in the 20th century and used in both World Wars. Go back to the beach and head in the opposite direction, taking the red lapilli road, next to the seashore, ending near the bridge over the stream. Cross the bridge and continue walking on Rua de São Pedro.

PRC9 PIC Prainha do Norte

Pass by the *chapel of São Pedro* that is habitually closed. It was built in the 18th century and the human face on its facade should be emphasized. Sculpted in stone and serving as a base to a cross on the facade, beneath which one finds two crossed keys under a mitre. The significance of these symbols is evident. The *Chapel of São Pedro*, was dedicated to Saint Peter, the first Pope of Christendom, to whom Jesus Christ handed the "*Keys to the Kingdom of the Skies*."

On your left side, the rural landscape consists of agricultural warehouses, used to store equipment and forage for animals. Continue walking for another 250 metres. When the road curves to the left and goes up, turn right into an old lane that will take you to Baixio, a coastline area where the sea rolls up to the rocks and where a newly asphalted road will lead you to where the port begins.

We can see well-looked after vineyards and wineries that have been rehabilitated in accordance with their original rustic style. We have reached Porto da Prainha, where a concrete wall was recently built along the road you will follow to protect the coast. Here you can see the most restive of the common sandpipers (*Actitis hypoleucos*) hunting insects, maggots and worms. You can also see other marine birds.

Pass by the lighthouse and continue walking on the path between the playing field and the sea lavas, where the ruins of an old windmill still mark their presence. A lonely wheel and the wooden gears rest on trunk base made out of stone. You are approaching a recreational and swimming area, with a volleyball field, picnic area, a strange set of benches and, of course, Poça Branca, the reason for all this. It is a well delineated natural pool, popular with the locals and the neighbouring villages, with a small bar welcoming you.

Leave this place by taking the asphalt road on your right and, further ahead, turn right again. Amid these bushes, soon you will again reach the seashore on a lapilli path, where you should turn left and continue walking until the penultimate light-post. From here you can see a basaltic arch and Rocha do Galo. On the background, you can see Baía das Canas, another locale of this village.

Return to the swimming area and now take the street *Rua da Poça Branca*, to the right of the picnic area, in the square. You will have to walk the whole path without ever diverging. Once again, the basaltic stone is the architectonic leitmotif inscribed in the houses that you see. There are also some vineyards on the landscape. You will reach a path that connects the church to the port. Turn right and go up, passing by a closed seashore water spring, moving along the margin of *Império's stream*, with small bridges that look ancient. Finally, visit the interior of the *church of Matriz*, a building that was erected in 1787 and which has preserved its original architectonic identity. End the trail at Largo do Império and rest for a few minutes.

TRAILS OF THE AZORES



PR10 PIC

Santana - Lajido

Difficulty: Easy Extension: 8,7 km Time Average: 2:30h Category: Linear



PR10 PIC Santana - Lajido

This trail begins near an electrical facility, where you will find a plaque signalling the entrance to Sant'Ana (to those coming from S. Roque). You should enter the secondary pathway that diverges from the upper part of the regional road and locate, between the houses numbered 7 and 9, a narrow entry to a path. Later you will have to walk up this pathway.



Keep walking straight for now and then turning right on a somewhat steep asphalted footpath that further ahead becomes a dirt road. After 190 metres of walking up, turn left at a fork, descending slightly. You will arrive in a wider zone where an embankment of Cabeço da Queimado (or Cabeço da Vigia) reveals red and black basaltic tonalities. Soon after, a footpath with rudimentary stairs, carved into a poorly consolidated terrain, take you to the rehabilitated whale lookout Vigia da Baleia, now surrounded by too much vegetation to serve its initial purpose of offering a clear view of the sea.

Today, from this lookout on the northern coast it will certainly be easier to see the lava formations of Santa Luzia, located at the end of the trail at Cabrito and Lajido, than a whale. If you did not bring binoculars and if the acacia trees and other vegetation has not been pruned, turn back and take the aforementioned lane located between houses number 7 and 9. This old footpath goes up for more than 600 metres, becoming wider and finally reaching the asphalt and a place where construction aggregates were extracted from Cabeço da Queimada.

PR10 PIC Santana - Lajido

Turn right and walk down the pathway, amid small agricultural parcels mostly occupied by low productivity pasture or uncultivated land. You will pass by the first houses, a small agglomeration of typical constructions in stone, and soon you read the street Rua de Cima de Santana. Turn right. You will pass by a house on your left, where the owner exhibits stone sculptures on top of the walls. A bit further ahead, you will find an old bullock cart from the 20th century in a shed next to the pathway. Soon thereafter you will find, on your left, a reddish secondary pathway made with cement and gravel. Take this pathway, pass by a house and head to the regional road via a shortcut. Here, turn slightly to the left and descend behind house n° 80, wherein you find a plaque with Centro Social Padre Alberto written on it. This secondary lane soon forks. Take a left at this fork and at the forthcoming forks. The ground, initially covered with grass becomes rocky, with grooves from the past remaining inscribed on the basalt.

You are now entering the *Protected Landscape Area of Vineyard Culture - North Zone.* When you get to the asphalt, continue descending. When a pronounced curve appears on your left on the footpath (asphalt ends 10 metres ahead), go down a shortcut on your right that soon becomes an old stone path that will take you to Baía do Gasparal. It is a pleasant place with some wineries. It is historically significant since it was used in the past as a dock for barrels of Verdelho wine produced in the area. Turn right and you shall find other important historical vestiges: (1) a poço de maré, a seashore water spring discovered in 1815 with a quadrangular wall, comprising 4 slabs perfectly fitted into each other and by 2 stone washers nearby; (2) a considerable area paved in stone,



VIGIA DA BALEIA (WHALE LOOKOUT)

A rectangular construction with a white facade and a protruding rooftop to protect the building from the rain and from the sun. Otherwise, the sun would shine directly on the large window, blocking the view of the whale watchers. From this lookout, the whale watcher would search for whales on the Atlantic sea before him. When a whale was sighted, a small rocket would be launched to warn the whalers: rocket in the air, a whale at sea. All chores on land were swiftly abandoned and the whalers of Pico would run to the sea, trying their luck on a whale. Whaling boats were always ready to go since the strident noise of the rocket meant that no time could be wasted. The first whalers to reach the sighted whale would earn their keep. At sea, time passed differently: to harpoon such a large animal could take several hours. These frenetic hunting expeditions took place mostly in the summer months. Due to the seasonality and the uncertainty of whale hunting, this was not the principal activity of the whalers for whom agriculture habitually was the other way of making a living.

PR10 PIC Santana - Lajido

so as to facilitate transportation of the wine barrels to the storehouse; (3) a high wall, a ruin of the old Armazém das Pipas (to store barrels) and a stone pavement that shows indentations that reveal the activities that took place here; (4) a natural inclined ramp providing access to the sea (an inclined ramp made out of stone that extends beyond the warehouse) in which the barrels rolled into an area (Carregadouro) by the sea where the barrels would be loaded onto boats through the use of wooden boards. Evidently, the weather and the sea dilapidated this area, leaving only marks of the past.

When you leave this pleasant place, do not take the dirt road but rather the coastal footpath, over the rocky headland or the slabs that were placed on the ground. Here, the coastline was replaced by a new lava flow that brought to light fossil deposits in some escarpments. Here we can find endemic species such as *Picconia azorica, Erica azorica, Myosotis maritima, Festuca petraea*. This cliff is also an important nesting area of the Cory's shearwater (*Calonectris diomedea borealis*).

Soon you will notice the ruins of a large house where there was a grape press in the bottom floor. You have arrived at Cabrito, where beautiful willow trees grow over the rocks, near a seashore water spring. Take the asphalt path, accompanied by the noise of the sea hitting the rocks. Here, several lava formations are noteworthy, as is the case of the elegant intertwined lava flows and rare tumulus (a barrow) with its arched, fractured, and crusted surface. When you leave Cabrito you will find Chapel of São Mateus, built on the 17th and 18th centuries. You should go around it to better see its interesting facade. It is chapel that was unusually built entirely in uncovered stone. On the facade, you find an illegible inscription and saliences decorated with remarkable floral motifs. Judging by its location, it seems that the sun never shines on the interior.

A few more hundred metres and you will reach Arcos, a place with a modest chapel around which locals organize, on the last weekend of August, the festivities knew as Festa da Nossa Senhora Rainha do Mundo. On your left, after the chapel, do notice a tidal well that is peculiarly attached to a tower. Part of the water that would be extracted from this well was raised to the top of the tower and then poured, via a conduit to the nearest house, where there was an alembic. Start walking again on the coastline and head toward Lajido, appreciating the beautiful panoramic views of the sea and the lava fields that are partially covered by *Festuca jubata*.

At Lajido, where this pleasant walk ends, do visit the the Interpretation Centre for the Landscape of the Pico Vineyard Culture and the houses the constructions that were rehabilitated: houses, wineries and their respective grape presses, warehouses, fig-fermentation tanks, the Solar dos Salgueiros, the poço de maré (tidal well) and the chapel of Nossa Senhora da Pureza, wherein a festivity takes place on the first week of September. When you visit the museum that preserves the cultural heritage of this community, you understand how the cultivation of the vineyards and the production of wine and "aguardente" (brandy) became so important to the economy of this municipality and how much human effort was required to conquer this rocky terrain.

TRAILS OF THE AZORES



PRC11 PIC

Calheta do Nesquim

Difficulty: Medium Extension: 8,6 km Time Average: 2:30h Category: Circular



PRC11 PIC Calheta do Nesquim

This is a circular trail that can be hiked in both directions but we recommend the best route. You begin at the church square, now *Largo do* Terreiro Anselmo Baleeiro, a son of this land in whose memory a statue was erected near the church, where it is possible to read: "Captain Anselmo da Silveira /1833-1912/ Founder of Whaling on the Island of Pico."

The first Whaling Shipowners was founded on 28-04-1876. Calheta do Nesquim was the first whaling centre in the island of Pico. There are plenty of vestiges of this activity throughout the trail you are about to make.

Around you there are some of the most important buildings and social facilities of this village: the bandstand, with a lyre appropriately placed above it; the "Império do Divino Espírito Santo"; the Multi-sport complex and the dock with its crane, 10 docked boats and, obviously, the church that was arduously erected in 1860, due to the efforts and commitment of the local population. With a single aisle, the church benefits from the luminosity that its exposition to the southern coast ensures and it offers a pleasant vista from its churchyard, which stands above the port. If you enter the church, an image of Saint Sebastian awaits you, the patron saint of this parish. In January, there are festivities that attract many foreigners but the biggest festivity takes place on this place on the 6th August, honouring Senhor do Bom Jesus, when a life-sized image of another altar of this church is brought out and extolled.

In the exterior wall of the church, we can find a plaque that pays a tribute to the 36 men that left this island to fight in the Portuguese Colonial Wars. Only one perished in combat. These memorials are repeated in several islands of the Azores and are habitually organized by the Parish Councils. There is also a fountain on the wall of the church that is still used today.

As you leave the square, as if heading to the port, you will pass by the *Casa dos Botes*, a building built in the 20th century, which consists of two large contiguous structures, almost entirely made out of stone. As the name suggests, it was here that the whaling boats were kept. Presently, the boats came out when festivities are taking place or to participate in regattas with their counterparts from other whaling villages. You will be very lucky if you see them in the water ... and lucky enough if *Casa dos Botes* is open. If not, go around the left side of this impressive building, heading to the back of the building to better appreciate the port that you will visit.

Return to the road which you will have to go up until the point at which it curves. You will then see, on your left, a football field. Go down after the first metrosideros, in a narrow lane, signalled by a plaque in which it is written: "Zona de Lazer/Parque Infantil."

This well-rehabilitated leisure area resulted from the use of an elevated part of the seashore called Morricão, certainly a merger of *Morro* (hill) with *Cão* (dog), which separates the playground from the sea. In addition to the playground and the pleasant view, there is also an externally reha-

PRC11 PIC Calheta do Nesquim

bilitated mill. Do notice the detail of the vane shaped as a whale on top of the mill. On the wall over the sea rocks, you shall find the first *Vigia da Baleia da Calheta do Nesquim* (Whale lookout) and probably the first on the island, built when such lookouts were still uncovered. As you leave this zone confined by a white grid, passing by a gate, head toward the *Poça das Mujas* swimming area where you will find a volleyball/football field on the sand and a pleasant bar with an esplanade.

Then, go up the dirt road and turn left, walking by the sea, on top of the rocks. This zone is characterised by a rural landscape, with an extensive network of stone walls that form longitudinal corrals where vineyards are cultivated. You will also find many annexes built on the 18th and 19th centuries. Dispersed throughout the terrain, there are various wineries made out of stone, some in a reasonable state of conservation, others clearly improved, that still perform perfectly the functions for which they were conceived, namely, the production of wine and holidaying. We can see terns that use sea cliffs and rocks to make their nests. The path leads you to pass near the cemetery while you see the coastline of the island, the houses of the village of Ribeiras and, further away, the village of Santa Bárbara, another place of this village. On some places on this side of the island, cemeteries were built at a great distance from the residential centres, vestiges of popular beliefs in witches and "souls from the other world."

Go up the asphalted path for a few metres until you reach a house on your left, where you will find an inscription "Varandas das Canadas", a signpost pointing to a Pedestrian Circuit that will take you to Gigana Whale Lookout. You are now in an upward gravel lane that leads you to the vineyard corrals and to the Vigia da Baleia that was rehabilitated by the Parish Council. A few metres up, you should exit on a secondary path that offers a panoramic view of Calheta do Nesquim. Turn left and follow this path, heading toward the cemetery: there you will find a volcanic cone named after the cemetery that you passed by earlier. Before you reach this peak, you will find, on your right, a lane with a wall on its



THE STORY OF THE DOG NESQUIM

It is said hay on the 16th century, on a tempestuous and dark evening, an adrift boat coming from Brazil and loaded with wood, sank near the southern coast of the island of Pico. Two sailors managed to survive. They were guided ashore by the dog of the boat, Nesquim, guiding the survivors with his barking to a small cove with a narrow entry. This cove was named after the dog. It is called "Calheta do Nesquim." Near the coast, there is a high cliff called "Morricão" where you shall pass, a place where supposedly the dog came ashore and saved three sailors. The dog earned the right to appear on the Crest of the village, next to a sperm-whale.

PRC11 PIC Calheta do Nesquim

right side that is higher than the wall on the left side. This lane becomes wider on the upper part, with its stone ground protected by the shade of the *Pittosporum undulatum*. A bit later, you get to the regional road. A few steps to the right and you find another asphalted pathway that you should go up. At the next fork, turn right and continue walking on the asphalt, heading toward *Fetais*.

Locals call this place *Jogo da Bola* (Ball Game) but no one could explain why. As usual, the oldest houses have preserved rocks over the tiles on the edges of the roof to prevent the wind from moving them. Do notice the chimneys, narrower than usual. In the lands of the upper hillside, corn and pasture replace the woods.

You will pass by several junctions of paths that go up but wait and descend on the first path that will appear on your right, a path that connects to the regional road where you find a junction with a curved mirror. Meanwhile, at the corner of one of these paths, you may observe the back of an old house with an incorporated cistern. The stone basin is still there, on the path next to the house. Despite the derelict state of the walls, you can still discern the typical blue (or indigo) with which they painted the bases and the mouldings of the windows and doors.

When you get to the regional road, turn right and walk for a few metres. Do not make a mistake now: you will have to leave the road, turning left, not to a pasture, but to a secondary pathway that appears immediately after, with a lawn and under the fresh shade of *Pittosporum undulatum*. Further down, you will find a fork: turn right and continue descending until you reach some cement stairs that lead you to an asphalted path. I could tell you to begin descending this path. However, in the opposing edge, you will find the continuation of this old lane that leads to the church of Calheta do Nesquim. Walk for about 50 metres and take a beautiful photograph of the centre of the village and its port. Meanwhile, you will find on your left an exit that will take you again to the pathway you have just left.

You are certainly not interested in abbreviating this pleasant hike. If you were, you could just descend to the church. Instead, take *Canada das Torresmas* until you leave the main pathway. Turn left and continue walking straight ahead, not pausing attention to *Canada do Mourro*. Here, the landscape consists of some houses, manual mills, threshing floors, grasslands and other crops. You will descend to the village only when you get to house number 12 of Família Fontes, on the path next to the gate. There you will find a staircase near the end of the path, which will lead you to the asphalted path of Feteira.

Turn left, walk for a few metres and descend to the pier of Feteira de Baixo and the swimming area of Portinho. While you are walking on the lapilli path, always close to the sea, you can take a beautiful photograph of Calheta do Nesquim. When you reach asphalt, turn left, always walking close to the main pathway. Turn left and keep going down until you get to the church where you began the trail.

TRAILS OF THE AZORES

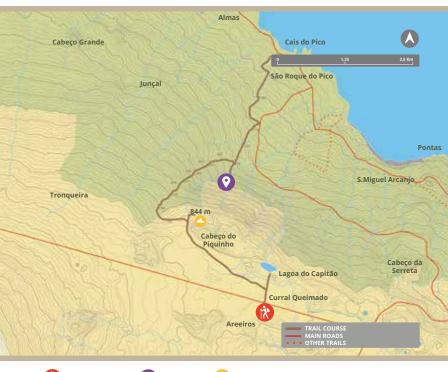


PR13 PIC

Starting Point

Lagoa do Capitão

Difficulty: Medium Extension: 9,2 km Time Average: 3:00h Category: Linear

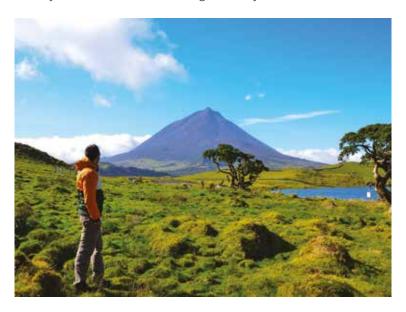




Peak

PR13 PIC Lagoa do Capitão

It is at Lagoa do Capitão, in the *Protected Landscape Area of the Central Zone*, that this trail begins. The semi-natural grasslands, quartered and stained by the dark green of *Juniperus*, *Ilex* and *Erica*, reflected on the water of the lagoon, together form a beautiful natural landscape sought after by innumerable visitors throughout the year.



You return from the lagoon by taking the footpath that took you there. Turn at the first fork on the right, continuing on the dirt road. The beauty of the majestic mountain will accompany you as you advance amid peats soaked by water from the rain and fog. The portals, with metallic tubes stuck to the ground, condition access by the cows. Soon you will be able to admire, on your right, the cliff of Lagoa do Capitão, a habitat of various species of endemic flora, such as Euphorbia stygiana, Ilex perado ssp. azorica, Viburnum treleasei and Juniperus brevifolia with or without Arceuthobium azoricum.

After walking 1,8 km of this path, you will find on your left another path, closed by a metallic gate, that accesses the ruins of an old cheese factory in the lower part Cabeço do Teixo, where the traditional Pico cheeses were made, with only 2 to 3 cm thickness, the thinnest in the Azores. The factory was in operation only during the summer months, benefiting from the freshness of the mountain. Do taste the traditional Bolo de Tijolo, a type of non-fermented thin bread, one of the ingredients of which is sweet potato. This bread was made in clay pans.

Continue on the same path. Soon you will make a small detour into a path that veers to the right. Go around Cabeço dos Piquinhos, continue

PR13 PIC Lagoa do Capitão

for 50 steps beyond the reservoir and you will arrive at a natural belvedere, where you will enjoy a stunning view over Village of São Roque and the cliff that you will descend to get there. This place is also a take-off spot for paragliding enthusiasts.

Go back and resume the walk, continuing descending on the previous path for 750 metres more. After passing underneath an electricity cable, continue on the path until you find a two-sided metallic gate on your right that leads to a pasture with a water tank inside. You will have to walk down this way for about 200 metres, paying attention to the sign-posts, until you enter a wood below the cliff. This stage requires caution! If visibility is low and you do not find the signalled entry into the wood, do not invent. Go back!

From here onwards you can initiate the descend without great difficulties, under a deep cover of vegetation, where we highlight various species, such as *Erica azorica, Frangula azorica, Pinus pinaster, Laurus azorica, Picconia azorica, Morella faya, Rubus hochstetterorum, Sanicula azorica, Bellis azorica, Cardamine caldeirarum* and the endemic orchids (*Platanthera micrantha*). A few tens of metres ahead, this trail accesses an old footpath, laterally delimited by small stone walls with rudimentary stairs. Someone with a trained ear will eventually identify an *Serinus canaria, Turdus merula azorensis*, a *Fringilla coelebs moreletti, Regulus regulus*, a *Sylvia atricapilla gularis* or a *Motacilla cinerea patriciae*.

The further you descend the steeper the path becomes. The ground becomes more uneven and always rocky. This is a more exhausting stage due to the nature of the terrain and the extra caution required with the steps. Nonetheless, it is a beautiful spectacle to see, the grand *Pittosporum undulatum* that now totally occupy the forest, the mosses that cover the simple walls and, in some places, the ground itself. Still in the *Pitto*-



FONTE (FOUNTAIN)

The water from this fountain comes from the hill-top. The water flows naturally down the hill, falling in artificially created cement conduits that direct the water to a reservoir. In the summer, the lack of water obliged women to come here to wash clothes and get water. These pilgrimages turned this place into a meeting point where people would chat. Later, water was transported via pipes. This originated the old system of piped water for the fountains of Cais do Pico and São Pedro do Outeiro. Presently this system is excluded from the municipality's water supply network.

PR13 PIC Lagoa do Capitão

sporum wood, nearer the end, if you find two alternative paths, chose the right one. You start hearing clearly the sound of the Thermo-Electric Plant and, finally: the sky and the sun, two elements long missing from this trail. Continue descending until you leave the asphalted pathway.

Walk up to a small square, cross the wooden bridge over stream of Dentro and continue walking for a few more metres until you get to the water-extraction facilities of the Fonte, a structure built in the 19th century.

Returning to Caminho da Fonte, go down, crossing the asphalt pathway that you will encounter further down, continuing on the opposite side of this old lane. You will get to a fork, turn right on the lapilli road. A new fork next to some agricultural constructions: turn left and descend, passing on the side of an improvised junkyard. You will get to another path: turn left and continue descending. You are now at Canárias. You will pass by a circular construction in stone, enclosed by a net, where the most important of three entries to Gruta das Canárias can be found. This lava tube with around 800 metres of length offers a great diversity of geological structures, notably: stalactites, stalagmites, lava columns, lava balls, enamelled formations, lateral benches, entwined lava pahoehoe, sinks, gas bubbles and limonite stalactites. It also contains some endemic species such as *Rugathodes pico* and *Cixius azopicavus*, as can be observed in the innumerable roots that are attached to the ceiling.

Continue descending until the next junction. You have reached the main road, turn left and walk this road for about 450 metres, until you find the Convent of S. Pedro de Alcântara. This building was built in the 18th century by Franciscan monks that wished to preserve the hope of the local population and help remake what the seismic and eruptive forces of nature had destroyed. Presently the building houses the youth hostel, but you may visit the church. The trail ends here but if you so choose, you can keep walking on the marginal road, heading toward the centre of Vila de São Roque.

You will pass by Cais Velho (the old port) where King D. Dinis (protector of navigation), from the height of his pedestal, looks upon a calm port without the agitation of agitation of earlier times. After approximately 60 years, in which boats were launched, whales were quartered and their fat was melted in cauldrons, in the 1940s everything changed: a new whaling factory was built 500 metres away from here, taking with it the boats and the whales. Next, you may visit the *Centro Multimédia* (Multimedia Centre) of the village, the *Posto de Turismo* (Tourism Centre), the Pharmacy and the Post Office. When you arrive at the port, if not on a Monday, do visit Whaling Industry Museum. In front of it, the monument to the whalers, depicting the unique moment at which the whaler harpoons the sperm-whale. While waiting for your ride, have a refreshing drink in the always busy *Clube Naval de São Roque*.

TRAILS OF THE AZORES



PR15 PIC

Mistérios do Sul do Pico

Difficulty: Easy Extension: 8,5 km Time Average: 3:00h Category: Linear



You are now in the Forest Reserve and Recreational Park of Mistério de São João, a nature reserve that occupies an area of 4 hectares, where *Erica azorica* woods predominate. In the 1950s leafy *Pinus pinaster* trees were planted here, and today they are the principal exotic species found here.



This nature reserve is a good example of what a complete forest park should be. In addition to the omnipresent fences for fallow deer and basic facilities, it offers other amenities and resources such as the *Forest* Divulgation Centre, a playground, a fitness circuit with training equipment, a multi-sport complex with physical training machines, a Croquet field and traditional games.

Before you begin these trail, you should observe, on the upper part of the road, the Parish Council and a modest monument that informs us that this was the place where the first parish church was built. In 1616 an agglomerate of around 40 houses already existed, when the place was still a part of the *Village of São Mateus*. It is said that this was a fertile land where grain crops were harvested, mainly wheat. A small chapel was built in 1619 that paid homage to St. John the Baptist, that before

1700 was augmented and elevated to a parish church, thus originating the village of São João. The volcanic eruptions that started on the 2 February 1718 buried part of the agricultural land, houses and the parish church. The religious images were mobbed to the chapel of Santo António, which we shall visit.

Begin this trail by entering the park, beside the sea, passing near the fallow deer fence, crossing the pine tree wood, heading toward the sanitary installations, descending on the dirt path that passes beneath the Multi-Sport Complex. It leads you to an asphalt pathway that descends around 30 metres, entering again, on your left, in another dirt road pathway that is flatter. On both sides of the path, a wood of *Pittosporum undulatum* covers the landscape. Passing by the small stream of Borda do Mistério (on the eastern limit of *Mistério de São João*), you will find some houses and vineyards. There still are people that place some ribbons to ward off birds so that they do not eat the mature grapes.

Soon you will begin to hear the sea rolling in the rocks and soon thereafter you will reach Baía da Arruda. In a distant past, the beach located here served as an anchoring point for boats and rumour has it that an improvised shipyard was established here in which at least one boat, called *Loureiro*, was built. Today, on this beach made of rocks of various dimensions, we cannot contemplate masts but unstable towers that some make jokingly, with rounded stones piled on top of each other. You will find a seashore water spring, now integrated into a small leisure area. The population of Arruda and Companhia de Cima walked down Caminho do Poço and procured here the water needed to satisfy their needs. They would have to descend a staircase with 365 stairs (it is said) constructed on rounded sea rocks hard to climb with a bucket of water in one's head. Continue walking and you will find, here and there, some vine corrals and hedges of *Banksia integrifolia*, *Morella faya* and *Metrosideros excelsa* that provide shade.

The footpath is now asphalted. On your left, you will see a plaque that indicates that *Rua do Poço* leads to Rua do Verdoso. You can see, to your right, a staircase made with rocks of considerable dimensions that of-



SÃO JOÃO CHEESE

It was a consequence of volcanic eruptions. Since the "mistérios" buried the fertile land, it was necessary to clear the highlands that could only be used for grazing and the production of milk. The cheese industry originated in the village of São João. It is said that it was here that the first cheese of the island of Pico was made here. The industry flourished and the cheese soon became an export to the islands of Faial and Terceira.

fers access to *Zona Balnear of* Ponta do Admoiro swimming area, which you should descend, passing near a small football field and by the "new" Poço do Admoiro (because the old well was long ago swollen by the sea). You should walk up the path, returning to Rua do Verdoso.

Continue your walk. A plaque points to a staircase that accesses *the* Maré do Verdoso swimming Area. This is the third of the seven tidal wells of the village that you will see. I believe that São João was the village with the greatest number of seashore water springs. It was fundamental in the past, but it ceased being so with the arrival of piped water in 1960-61.

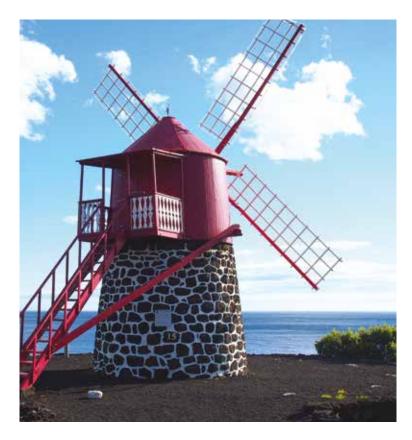
Go down to the well and, if you advance a bit further, you will see a natural pool transformed into a swimming area with showers, bins and signposts. Returning to the footpath, continue walking ahead and, a bit later, turn left into a narrow lane until you reach Casa do Pico, a House-Museum managed by *Alvião - Association for the Preservation of the Cultural Heritage of São João* a building that was donated by an emigrant after the association was established in 2000.

These and other rural houses in the vicinity with their respective agricultural annexes are probably the oldest nucleous of rural residences on the village. They began being built in the 18th century. Casa do Pico stands out not only for its architectonic quality but also for its state of conservation. It is a two-floor linear house with two cachorros (modillions) next to one of the windows of the upper floor, built in stone, plastered and limed with the exception of the stone mouldings. It has other rooms on the eastern side and its gable roof is covered by half-moon traditional roof tiles.

Inside we find some farming machines, regional costumes and diverse ethnographic articles. Usually, it is not open. In order to visit it, you will have to go to the Alvião'a headquarters just 100 metres away. To get there, descend again the pathway and walk straight, passing by Rua da Igreja on your left and then Alvião's house, head office of the association with the same name that houses, on its lower floor, the old cheese factory from which the name of *Queijo São João*, one of Pico's typical cheeses, is derived. There you will find someone to accompany you to the aforementioned *Casa do Pico*.

The wood logs that come from the woods that grew over the *mistérios* were an important export to Faial island. Such was its importance that the village acquired a boat called Boa Viagem that was used to transport cheese and wood to Faial island. Maritime transportation to Terceira island was undertaken in coastal boats that departed from the village *of Ribeiras*.

Next, you will head to the religious centre of S. João. You will pass first by the square and by Holy Spirit Brotherhood's House, then by the Church of Saint John Baptist, built in 1726, above the street, reconstructed on



the same place in 1829. Here, a panel of glazed tile lists the names of the sanjoanenses (people from the Village of São João) that fought in the Portuguese colonies and a bust pays homage to Monsignor José Pereira da Silva, born in this village at the end of the 19th century. Next, the Império de S. João.

Continuing, you will reach *Pesqueiro de Santa Cruz*, where today you will find a port. In 1893, a cyclone destroyed houses, structures, boats and naval equipment that the company Armação Baleeira had here, forcing it to move to Faial island. This is also the home of Genuíno Madruga, a seaman well known in the Azores for his two solo circumnavigations of the planet's vast oceans (in 2000 and 2007) in his small boat "Hemingway." He was the first Azorean to accomplish such a feat.

When you leave, head east, walking on *Rua do Porto* until you reach a place where the street offers an excellent view over the port. There you will find a plaque signalling the chapel of *Santo António*. It is presently the oldest religious temple of the village. It is said that it was built around

1700. The chapel is private and access to it is only possible with the consent of its proprietors that live next to it. Further ahead, descend to visit the Arinhas Swimming and Recreational Area. Return to *Rua do Porto* and continue walking. Further ahead, leave this street and take a right and walk along the seashore, on the old road of *Ponta Rasa* that shall lead you to the mill. The Ponta Rasa Mill is one of two mills that were rehabilitated, among the seven that the village possessed. Although you cannot enter it, you can go up the staircase and take some beautiful photographs.

There was another volcanic eruption on the 10th July 1720, preceded by numerous earthquakes which resulted "in sixteen volcanic emanations from the slopes of Pico, behind Cabeço do Soldão," that consumed land and vineyards, destroying 30 houses and forming Mistério da Silveira. The rest of this trail goes through the Mistério.

You will now walk a path of 230 metres on the regional road, passing by a piece of land that was once used for playing football and moto-crossing. A bit later, you should turn into a dirt road on your right. You are now on a secondary road, flanked by woods where chanting birds seek refuge. You will have to walk for 1930 metres and then you should find a signpost indicating the access to the rocky seashore, where you will walk a 350-metre path, in the same direction. Be cautious because the rocks are often loose and very slippery. Far away, you can view Lajes and Ponta do Castelete. A signpost indicates that you should abandon this difficult uneven terrain and return to the pathway.

Continue for 550 metres until you reach a tidal well (known as Fonte da Silveira), built in 1940. It was closed with a cover but a pump was installed and water is still extracted from it. Beside it, you will find a picnic area. You are now at Fonte. Straight ahead you find a beach volleyball area. Then the asphalt begins. Walk up this path and turn right. There you will find a small bar with an esplanade, next to the descent to the swimming area with showers, a natural pool and a small port. Remain on the asphalt road amid metrosideros and black rocks...there is still time to see another seashore water spring on your left.

You reach the main road, continue walking in the same direction until you pass the houses of Aldeia da Fonte, a tourism complex. You will notice a narrow lane on your right, signalled as Pesqueiro Pau Rodrigues. This footpath soon merges into a well-preserved trail, maintained by Aldeia da Fonte. It offers good protections in the zones of greater risk. After this visit, return by taking the same pathway and continue walking until you reach the road, next to a gasoline station. Advance a few metres to the right and end this trail next to Império da Silveira, e temple dedicated to the Holy Spirit, built in 1723 as a homage to a religious request made during the volcanic eruption of 1720. The locals asked God to protect Silveira from the devastating lava. The existing temple was built in the 20th century. Right beside it, you can still visit the church of São Bartolomeu, which started being built in 1878.

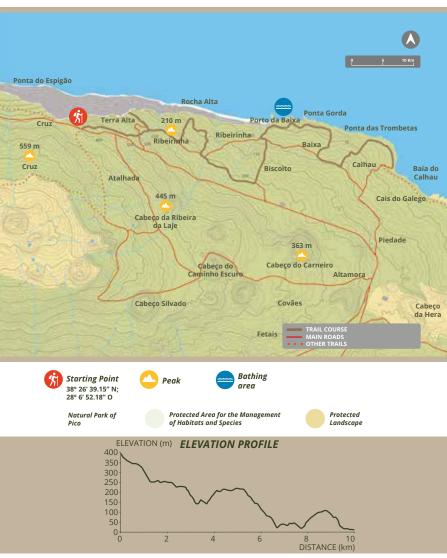
TRAILS OF THE AZORES



PR18 PIC

Nove Canadas da Ribeirinha

Difficulty: Easy Extension: 10 km Time Average: 4:00h Category: Linear



PR18 PIC Nove Canadas da Ribeirinha

Begin the trail by descending Caminho da Atalhada, next to the plaque at the beginning of the trail. You are at the pathway the connected the village of Ribeirinha de Santo Amaro.



The ground, now covered by grass, was once a stone pathway to facilitate the circulation of bullock carts. The cart wheels left indentations carved on the rocky ground, an indelible proof of their passage. The pathway is ornamented with a mixture of arboreal species of the *Laurissilva* forest of the Azores, such as *Ilex perado ssp. azorica*, *Vaccinium cylindraceum*, *Laurus azorica* and *Erica azorica* that invade the trail, obliging us to circumvent them. The trail goes through a cryptomeria wood and descends into a refreshing shady footpath. Far away, you can see the island of São Jorge on your right and observe less clearly, behind it, Terceira island. Here you can see many common buzzards (*Buteo buteo ssp. rothschildi*), erroneously called "*milhafres*" since this bird is more closely related to eagles.

Go straight ahead when you get to a house in ruins, not going up or descending other paths that you will come across. Cisterns were obligatory on an island that has always suffered from the lack of water. They appear on pastures and were constructed in a manner different from

PR18 PIC Nove Canadas da Ribeirinha

the usual cisterns. You will reach *Ladeira da Terra Alta*, an asphalted footpath. Cross it and continue descending the continuation of this old pathway. Soon you will see the first houses of the locality of *Terra Alta* in the village of *Ribeirinha*. Bear in mind that before you reach the first house, you should turn left into a lane, crossing again Ladeira da Terra Alta and enter *Canada da Rocha*, a rural lane that will take you to the belvedere Miradouro do Alto dos Cedros. This is a 400-metre detour, a path that does not go down or up. In the final part, this pathway becomes a narrow lane covered by a wood. Suddenly you find yourself in the Belvedere. If you look closely, this lane continues descending the cliff toward the sea. From the belvedere, you can only see the northern coast on the side of São Roque. First, you see the houses near the bay Baía do Canto and then those of Prainha and, far away, the houses of São Roque.

Return to Ladeira da Terra Alta, walk down a few hundred metres and then, after curving twice in different directions, walk to the left, descending Caminho da Fonte. This was the rural lane that was once used by the local population to get water from the Fonte, a water spring located on the hillside. This steep descent goes through agricultural land, some of which apparently abandoned, invaded by the spots of fennel. We have now reached a zone of vineyards where the path curves to the right, up to a large chestnut tree, before a concrete upward path that you should take. A few metres ahead, the path turns left, next to an old house that is presently a haystack. Once it was a school, a hard to believe fact given its dimension and distance from the centre of the village.

Soon thereafter you reach Caminho da Quebrada, footpath you should descend slightly, continuing ahead on the dirt road. More chestnut trees will appear before the path merges into the lane Caminho dos Vais, which you should go up, finding some *Cupressus*, a species that is uncommon here. After passing by an old football field you will get to the road, next to a bus garage belonging to the company Cristiano Limitada.

You will now cross the centre of Ribeirinha, the youngest village of the island. Ribeirinha became a village in 1980. The *People's* House also houses the *Community Centre*. Nearby, a public fountain that was built in 1955, with a plaque above it that pays tribute to those that contributed to the construction of the public network of piped water. In front of you stands the church of *Santo Antão*, a religious temple that is thought to predate the church of Piedade, built in 1756. Soon after you will find the wide stream of *Fundo*. On your right, the Largo da Igreja Carpenters, an industrial complex that consists of a workshop with a typical facade with an annexe used for the drying of wood. Soon after the building of the Parish Council, the "Império" of the Holy Spirit, built in 1928 and, on the other side of the road, the car park of Largo do Império where you will find a homage to those that left this land to fight in the Portuguese colonies.

Continue walking until you find the pathway Canada da Ladeira, which begins in front of another public fountain, also built in 1955. Walk down to the end of the residential area and continue on a dirt road, initially adorned

PR18 PIC Nove Canadas da Ribeirinha

with *Pittosporum undulatum*. Then you have to go through a very uneven terrain with vineyard corrals that, as always, mould the landscape. You can see some fruit trees, such as fig-trees and plum-trees. The path veers to the left and keeps descending until you reach the asphalt road of the locality of *Ao Foro*, where you should turn left. This landscape is characterised by the aforementioned corrals, grasslands, pyramidal piles of stones (*maroiços*) and some wineries and haystacks dispersed throughout.

Advance only a few metres on the asphalt, turning right and entering Canada do Mar, a dirt road that descends onto the seashore. Listen to the sea rolling on the rocks and look at the simple staircase that will take you to Baixa da Ribeirinha. Here, a recently amplified and rehabilitated cemented port, which rests upon an original rock structure, enables the docking of small fishing boats. It is also used as a swimming area, wherein one finds a bar and barbecues.

As you leave this place, you can appreciate an extraordinary variety and density of endemic plants on the seashore embankment: in less than 2 square metres you will find *Azorina vidalii*, *Festuca petraea*, *Pericallis malvifolia*, *Euphorbia azorica* and *Hedera azorica*

As you pass by the first houses, turn left and walk on the seashore pathway, where you will find other (fake) wineries. Next, you will come across a fork: go down, following the wooden electricity posts. The pathway ends near an isolated house. Walk for another 10 metres over the rocks ahead and then turn right into an old stone walled lane, less than 1 metre-wide. Under the refreshing shade of vegetation, you can see the walls of the old vineyard corrals that have been abandoned. Initially, you will walk over stones, sometimes over large slabs, but when the ascent becomes very steep, the roots of the Metrosideros excelsa serve as stairs. Some curves later, in a less inclined terrain, the lane widens and becomes a lapilli pathway surrounded by vineyards. At the next fork turn right and head straight to the houses, already on the asphalted ground. Go up a few more metres and you will reach another pathway, turning leftward for some time until you encounter a secondary footpath on your left that you should take. Further down, turn right, entering a footpath that crosses the wood. From here onward if you find other crossings, turn always left and soon you will be descending steeper terrain, now in a narrower path enclosed by unusually high walls that once protected the vineyards from the oceanic salty winds.

You will reach Ponta das Trombetas, over the black rocks, overseeing the sea. Turn right, heading to the Calhau swimming Area, an area belonging to the adjoining village of Piedade. Walk very carefully. Soon you will arrive near a pool, a volleyball field and a bar in the swimming area. Continue walking a bit further until you reach the square *Largo do Calhau*, where you shall find the port and where this trail ends and another begins (for more information, please read the description of trail *PR3 PIC-Porto do Calhau/Manhenha*.

TRAILS OF THE AZORES



PR19 PIC

Caminho das Lagoas

Difficulty: Easy Extension: 22 km Time Average: 7:00h Category: Linear



PR19 PIC Caminho das Lagoas

This trail begins on a transversal road that connects the municipality of Lajes to the municipality of São Roque. It crosses the interior of the island, beginning near Casa do Guarda Florestal da Serra da Junqueira - Corre Água. Here begins the Caminho das Lagoas, an asphalted road that goes eastward.

You will pass by the many volcanic peaks that one finds in this elevated and old part of the island. It still is, undoubtedly, one of the richest and most important natural heritage sites of the Azores, with regard to ecosystems, habitats and species. Attesting this fact are the diverse classified areas that the trail crosses, some under various protective designations: Caveiro Natural Reserve, Mistério da *Prainha Natural Reserve*, *Landscape Protected Area - Western Zone*, the *Protected Area for the Management of Habitats and Species of Lagoa do Caiado* and the Ramsar Site of the Planalto Central do Pico (Central Plateau of Pico).

Due to its geomorphology, one finds on the island of Pico an abundance of small ponds but also of pleasant but shallow lagoons, especially in the interior of the volcanic cones that predominate in this region of Planalto da Achada. Some persons have identified approximately 30 lagoons on this island.

As you move away from the mountain and begin to enter this central plateau, a volcanic mountain range almost 30-km long becomes visible, stretching from west to east, comprising 190 small volcanos, eruptive fissures, volcanic cones and lava spatter cones. Some of these cones contain temporary lagoons. Other lagoons that you will visit hold water throughout the year making it possible for migratory birds to stop here. This fact makes this landscape comparatively more important.

Generally speaking, throughout the whole trail, the path divides a mosaic formed by a natural vegetation of great environmental value and semi-natural grasslands, often invaded by *Juncus acutus* and other species. These fragments of vegetations preserve the integrity of the natural biological communities that inhabit this mountain and characterize its habitats. We can appreciate the different species of the native flora at the edges of this trail. The laurissilva comprises *Ilex perado ssp. azorica, Laurus azorica, Frangula azorica, Vaccinium cylindraceum,* and a lot of Erica azorica. In such an environmentally rich place, even the stone walls are covered with white lichens that contrast with the different greens of the ferns and the remaining flora.

You will pass by the lane that accesses the secondary road, to the Fernando Bettencourt's Tentadeiro. It is here, near Cabeço do Redondo, that this brave islander raises a few tents of wild cattle, the first livestock farm of the island. Soon after you will see the 8 wind turbines of the Terras do Canto Wind Farm.

Unconcerned, rabbits cross the pathway as you reach the beginning of another trail, *PR2 PIC - Caminho dos Burros* (northern side), 2,4 km after having started your hike. You can walk this trail in another day. Today, you will remain on this trail, passing by a Canadian gate (some tubes inserted into the ground that enables the passing of cars but efficiently disables the passing

PR19 PIC Caminho das Lagoas

of cattle, whose hoofs do not hold securely to the round tubes placed on the ground). You have now entered the Natural Forest Reserve of the Caiado Lake. The pathway becomes more uneven, with more curves, as some small lagoons appear. At the base of the cone Cabeço do Landroal, on your right, you will find one of these small lagoons, almost closed off by the fluctuating vegetation. This area is visited by some migratory birds that come here to rest and feed, such as the grey heron (*Ardea cinerea*). After passing by the wind farm you will find, on the other side of the pathway, several *Euphorbia stygiana* one of the most interesting endemic flora species found in the Azores. The *Juniperus brevifolia* can now be seen in larger numbers together with *Hedera azorica* and *Culcita macrocarpa*.

Finally, you begin to see the pathway that leads to Lagoa do Caiado, the largest lagoon on the island, with an area of 5,5 hectares, less than 5 metres deep.A bit further ahead, descend on the pathway to your left. As you descend you will encounter the more secluded Lagoa Seca which, despite its name, holds translucent water that lets you see the bottom of the lagoon. Continue descending until you reach the dam of Lagoa do Caiado. After visiting the lagoon, head back to the fork.

After returning to the fork, continue walking on the lagoon's path, heading toward Grotões, a name given to a volcano that is distinguished by its dimension on the landscape ahead of you. Go around it. Here the view of the island of São Jorge is superb. The entire island can be seen. Then you will come across a new fork, next to two large holes. Take the pathway on your right, that will lead you to a descent to Lagoa do Paul. The path that leads to this lagoon is 2,5 km long and you will have to walk it again when you return. The lagoon, as the surrounding area, is composed of pastures inhabited by species that are typical of humid zones, by woods of Juniperus and Erica. From here it is possible to easily observe birds of different species, such as *Scolopax, Gallinago, Anas*, migratory water birds and much more.

On your way back to the pathway, continue walking until you can see the southern part of the island and Vulcão do Topo, which retains the water of Lagoa do Paul. You are now entering the *Caveiro Natural Reserve*, a protected area of great interest from a conservation point of view. Before you the so-called cloud forest, where Juniperus predominate. After having passed by some ponds in the highest point of the trail, you will end up finding a belvedere and Lagoa da Rosada. This lagoon is less circular than the others and is surrounded by high pastures. Walk for another 800 metres until you find a fork. Walk straight ahead, heading toward "Piedade-Terra Alta," just as indicated on the plaque. Soon you will see Lagoa do Peixinho, a 9-metre-deep lagoon, the deepest on the island of Pico.

A bit later you will reach a junction where an old plaque indicates the path to "Terra Alta," which you should take, walking straight ahead. When the path starts descending in a more pronounced manner you will find a fork: turn left and continue descending. Further down, another path on the left merges with the one you are walking on. Keep walking straight. At the next crossing, turn left, heading toward "Terra Alta." The trail ends when you reach the main road, away from any settlement, where you will be able to enjoy an excellent view of the island of São Jorge and the beginning of trail *PR18 PIC - Nove Canadas da Ribeirinha*.



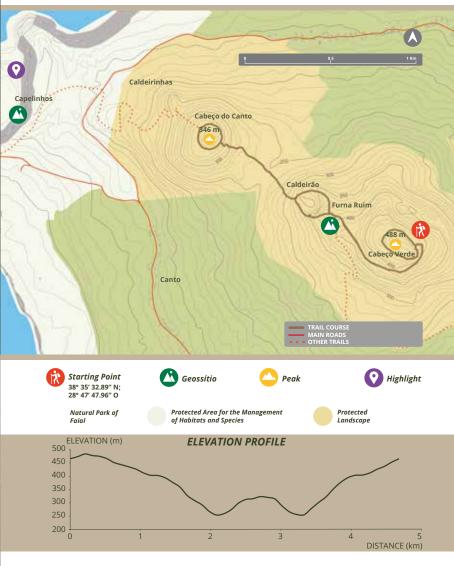
TRAILS OF THE AZORES



PRC1 FAI

Capelo - Capelinhos

Difficulty: Medium Extension: 5 km Time Average: 1:30h Category: Circular



PRC1 FAI Capelo - Capelinhos

This is a footpath that will take you walking over some of the cabeços of Capelo's parish, aligned by the volcanic phenomena that made the island grow. *Cabeços* is the name traditionally given in Faial to the monogenetic basalt cones raised by volcanic eruptions.

The trail starts on the top of Cabeço Verde, 488 metres high, where you can leave your vehicle. You start the walk by going anti-clockwise through the path that goes around the vegetation covered crater. Down below, the outline of the Baía das Cabras, with the houses of Fajã da Praia do Norte appearing before the cliff that stretches up to Alto da Baleia. After walking half of this way that crowns this hill, the Cabeço do Canto will appear to you in the foreground, to the northwest, and further off, the Capelinhos. Afterwards is the entire south coast of this part of the island that presents itself to us. When you finish the way



around, you see, on the climb to the top of the Caldeira, the Cabeço do Fogo, formed by the historical eruption of 1672. Now it is not hard to understand that you are on an alignment of volcanic cones, the last of which is the Capelinhos, that appeared in 1958, in a path entirely inside the *Central Zone Protected Landscape Area*.

Afterwards, you will start a descent of 750 metres, through the secondary road that leads to Cabeço Verde. At this altitude, species like the Woodwardia radicans, a fern with large hanging leaves that mingles in

PRC1 FAI Capelo - Capelinhos

the slopes with the Hydrangeas, the ivy endemic to these islands, and several herbaceous plants, are common. In the scars of the slopes along the way, we see the true nature of this volcano: under the green cover of the hills, red scoria and hard rock are hidden.

When the road turns left for the first time, leave it, following a path to the right, that will take that will take you to Furna Ruim and afterwards to the Caldeirão. You start going down using a staircase with roughly crafted rails among *Ilex perado ssp. azorica, Picconia azorica, Vaccinium cylindraceum, Hypericum* and *Woodwardia*, realizing that, to your left, the *Pittosporum undulatum* bush covers something dark and deep... the Furna Ruim. A small viewpoint is ready to show you a part of this creation of nature. The size of this ravine with steep and deep slopes is frightening. Right there, some moss belonging to the *Neckera intermedia* species, not frequent in the Azores islands, forms expressive curtains that cover and hang from the branches.

Continue under the *Pittosporum undulatum* for 20 metres and you will see the path splitting in two, though in reality they are the same that goes around the Caldeirão. This time go to the left, by the more shadowy part. When you reach the sunlight again, you will find a little viewpoint to your right. The crater called Caldeirão stands at your feet and the hill in front of you is the Cabeço do Canto, your next goal. In the distance, the Capelinhos volcano starts to show itself. Going around the Caldeirão, go down through a path, that is sometimes steep, until you reach the



CAPELINHOS VOLCANO

It is a surtseyan-type volcanic eruption, integral part of the Capelo volcanic complex, standing at the end of a NW-SE oriented alignment of volcanic cones. The eruptions in its origin kept going between September 27th, 1957 and October 24th, 1958. No human lives were lost, but the eruption and the seismic crisis associated with it, destroying homesteads and making agricultural fields and pastures unusable in the neighbouring parishes, contributed to a loss of population of about 50%, as a consequence of the emigration to the United States that ensued.

The strong erosion felt since 1958 has already reduced this volcano to about 65% of its original area. However, this is still an active volcano, from which there are emissions of water vapour and toxic gases at high temperatures through an air-hole placed in the north zone.

The lighthouse that marks the former limit of dry land before the eruption can now be visited. Next to the lighthouse stands the Capelinhos Volcano Interpretation Centre.

PRC1 FAI Capelo - Capelinhos

the dirt road Obeying the signals, cross the path and start a new climb to conquer the Cabeço do Canto. Go up through the tall *Pittosporum undulatum* and *Erica azorica* bush, that cast shadow on some *Myrsine africana* that overgrow the path and to some rare *Pteris incompleta*: ferns that show the peculiarity of having their leaves subdivided at the base... a characteristic exclusive to this species, at least in the Azores. Prepare yourself because the final climb of this Cabeço is steep and on slippery ground, despite the help of some wooden steps. When you reach the top go around the summit through the right, over a hard ground where practically nothing else grows. When you reach the triangulation, pillar placed on the 346 metres altitude mark, you have an exceptional panorama of the Capelinhos volcano and of the lighthouse that saw it rise.

It is suggested that, having arrived here, you take the same way back to the starting point. However, as it is possible to continue descending to the west, covering the last part of footpath PR6 FAI – *Dez Vulcões* you can choose to do it, continuing then to the Capelinhos Volcano Interpretation Centre.



TRAILS OF THE AZORES



PRC2 FAI

Rocha da Fajã

Difficulty: Easy Extension: 5 km Time Average: 2:00h Category: Circular

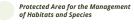


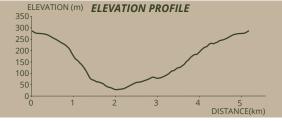




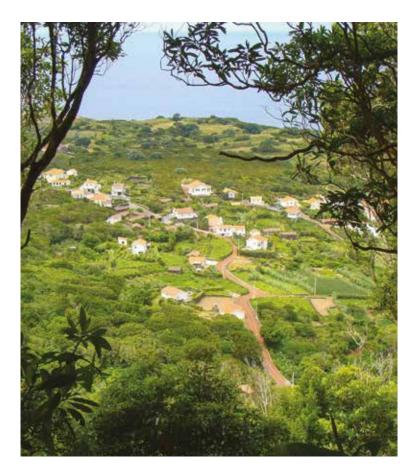


Natural Park of Faial





This path starts in Praia do Norte's parish, with the Cabeço do Fogo as a backdrop, in the place where Rua da Arramada joins the main road. After the first houses turn right, through the Rua do Cemitério. As the name says, you will quickly find the graveyard with its 1889 chapel.



Go down between the agricultural fields that are apparently not to well suited to this activity. Around here mostly corn is grown, mixed with a lot of cane. A typical sight in Faial island where, due the shortage of stone to build walls, we usually see cane and hydrangeas separating agricultural plots.

Up ahead you reach a crossing of two roads: one that will take you to the path that goes down to the headland, and another that will bring you back through another path. We pass some greenish water tanks with-

out hearing the usual frogs... You only hear the machines in the stone quarry located in the headland. We arrive at a small rectangular pasture, sided by *Phormium tenax* and *Buxus sempervirens*, that gives entrance to an ancient footpath, carved in rock by the needs of men, that gives access to the headland.

We start to have the first glimpses over the houses and lands down below. The kite birds fly over this area. The tufts of *Carex hochstetteriana*, the *Polypodium azoricum*, the *Hedera azorica*, the *Smilax divaricata*, the *Lysimachia azorica* and the *Picconia azorica*, all of them endemic, are, along with the *Asplenium hemionitis* (a star shaped leaf fern), the most interesting notes in the existing flora.

It is really a very pleasant descent, with the sun piercing through the canopy of a wood with diversified trees: *Cryptomeria japonica*, *populus sp.*, *Pittosporum undulatum*, *Morella faya*. Sometimes on a gentle slope, others over stone steps, the winding downward path becomes easy and safe. In each sharp turn of the way, it is possible to take panoramic pictures of the houses of the headland and of the coastal lavas, sometimes there are little detours to do so.

Closer to the end, you will pass by a 1937 fountain, dedicated to *Nossa Senhora da Rocha* and you start to see the semi-savage vine climbing over the trees, holding on to the branches with its tendrils, so not to drop the bunches of grapes.

We finish the descent next to the *stream of Serrado Novo*. The path now continues going down the *Rua das Adegas* (Wine-cellar's Street). In the headland, some of the wine-cellars are well restored, transformed in to summer houses, or permanent ones of some of the inhabitants of Faial.



CERCA

It is maybe the oldest building in existence in the Fajã and probably the first one to be built here, in the decade of 1760. This estate, of about 150 "alqueires" (about 14,5 ha), with a big sea front, got its name because it is enclosed on all sides with tall stone walls, many of which still exist. It had big entrance gates in several places of the "cerca" (wall), one of which close to the harbour, in the beginning of the path that will take you in its voyage to the important housing and agricultural settlement of this property. In the evening, all the gates, some with their typical "hammers", were closed, separating the Cerca from the rest of the island for a few hours. In one of them, on the back of the gate's upper beam, the date of 1761 is shown, probably the oldest observable.

The most important productions were: wine, mainly "verdelho", of which they would get to produce 30 barrels a year, and the corn, also abundantly cultivated, out of which bread was made, because there were many mouths to feed. We have a record of that in the ovens that existed... but are now in ruins.

Other wine-cellars keep their original function, because this is still a wine producing area. Finally, you can admire the Rocha da Fajã, through which you came down, that shows, on top, the little valley from where the Cabras' stream hurls down.

You start to hear the sea rolling the pebbles and you reach the car parking that gives access to Fajã beach sand strip, a bathing area without surveillance as the signs show, but very sought after, including for surfing. It possesses public rest-room facilities.

Walking a little further on the coastal road you pass the simple Fajã Park, where you can picnic in the shadow cast by a *Salix* or drink water from the small fountain there. Continuing further you will find a "tidal well" built in 1768 and belonging to the "Cerca". It was covered with a mesh after the 1998 earthquake that may have moved some stones, thus creating some danger.

The trail continues turning then and there to the left through an old path, but in case you want to, you can walk 150 metres more to visit the harbour, where a fountain with a tank quenches the thirst of Atlantic canaries and sparrows the come here to drink. Some cement passages over the harbour's black lavas help the access mainly of fishermen that want to go back to their fishing grounds.



Back to the path we mentioned, you will walk among small plots of land with several different crops, limited by *Banksia* and cane hedges. Most of them have pasture or corn, but you can still see plants like sweet potato or vine. These lands belonged to the "Cerca", as well as an old and long barn, to the right, entirely made of stone, with a door and three windows, that still is used as a storage space.

There was nothing in this headland before 1672. If it existed, it was certainly much smaller and probably made out of materials fallen from the cliff. What the fajã is today is the result of the lava flows from the historical eruption that started that year at the Cabeço do Fogo. To the other side of the island, where Varadouro is today, lava also flowed and in the same way it spread in to the sea, forming bare rock aerial platforms, leaving the village of Capelo, with its 45 houses and 160 inhabitants, temporarily isolated from the rest of the island. But human ingeniousness quickly took advantage of this adversity imposed by nature. In the fields affected by the lava they grew vine, and in the more developed soils they grew corn.

When entering a courtyard, with buildings all around it and a big gate through which you will exit, you get the feeling that you are in a private property... and in fact you are. This was the heart of the Cerca. To your right a group of adjoining buildings that were (and still are) used as a wine-cellar and hand-mill to grind the grain, with some massive stones outside serving as seats. The biggest of them was the top beam of the Lower Gate, that allowed exit of this courtyard towards the path to the harbour, from where you climbed. The other ones belonged to the first wine tank that was built here, when grapes were still pressed by the feet of the workers and that, in the meanwhile, was dismantled in the first decades of the 20th century, when a press was installed.

One of the times I went there, I was received by the couple Maria Emília and António Medeiros, owners of part of the land of the old Cerca, that were kind enough to take me on a guided tour. Inside the wine-cellar, they called my attention to the beams and to the press's shaft, made of Brazilwood, "red and hard", that was brought by the ancient ships and caravels, unloaded onto Horta's docks and bought only by the "Lords that could afford it". The mill building has two floors: bellow the grain was ground, above the steward of the estate and some of his workers slept. There is still a millstone there, acting as a table, on a cement stand inlaid with the limpet's shells that Mr. Antonio used to gather with a rowboat, on a reef close to the lighthouse... This was before the Capelinhos eruption. Here there is also a big cistern, separated from the houses, able to keep 109 barrels of water (more than 45.000 litres) and another one, next to the wine-cellar, that one can climb on, also serving as a viewpoint. Part of this water was used in the 2 stills that existed, making agua-vitae another important product of this farm.

When leaving the Cerca, you come before the Chapel of N^a Sr. ^a da Penha de França. History tells that in 18th century, in France, during a persecution of the Church, the Queen ordered that the statues of saints were boxed and thrown at sea, and that would justify that (supposedly... the way it is told



by numerous traditions in the Azores) this image of Our Lady was driven ashore on Fajã's beach. The local population tried to take it on their backs to Praia do Norte's church. Strangely, the image got so heavy that the men couldn't carry it any more. They saw this as a sign that "The Saint doesn't want to leave Fajã", so they turned back and built this chapel here, in 1790.

No go up the Rua da Ermida and turn left at the Rua do Porto. Up ahead turn right again in to Rua de Portugal. Passing by the last houses you will see on the headland, you start to climb over asphalt up until an apparently abandoned water reservoir, close to a group of bee hives in the land plot in front. The mark to turn left is only effective a few metres up ahead. A sign says: Praia do Norte 1,5 km. Go in that path, known as the "Ladeira dos Burros", that will take you back to the top of the rock, this time through a less steeper way. This is an area of chestnut trees and canes, some of which may have been taken from here to be used in traditional coastal rock fishing. The path gets narrower, continues to meander through medium tension electrical poles and you will reach the top of the rock easily. Follow this access way to the agricultural plots, passing next to some of the oldest houses in Praia do Norte. When you reach a path turn left, then left again a little up ahead, crossing the riverbed of one of the tributaries of Serrado's stream, where you will see, further uphill, the arches of the bridge built in 1886 on the main road. You will quickly find again the trail you did before. Walk it in the opposite sense and return to the starting point, thus ending this trail.

TRAILS OF THE AZORES



PR3 FAI

Levada

Difficulty: Easy Extension: 8 km Time Average: 2:30h Category: Linear



PR3 FAI Levada

It is important to note that this footpath requires adequate footwear because there are muddy sections or puddles that sometimes are not easy to go around. You should also take a flash-light or, at least, a mobile phone to light your passage across a tunnel that you will have to go through.

This footpath starts at Alto do Chão, on the northern hillside of the Caldeira, where the road for motor vehicles ends and an upward ramp of a loose material begins. This slope will take you to a *Levada* (water-way) that is the reason for the name of this footpath. The trail starts here, though not the *Levada*, that started a few kilometres back in the opposite direction. Still, you will be walking along side it for the next 6 kilometres.

The 1998 earthquake caused significant damage either in the *Levada* either in the slopes upstream. About 4/5 of the Levada was destroyed, buried or overgrown by vegetation. In 2010, Faial Natural Park began restoring this historical heritage, having already recovered a great part of it and clearing the passage where it was necessary, making it possible to open this footpath in 2014. In the first kilometres, there is still some work to be done, in the final half, the *Levada* is at its best. It is there that you can see the water running in its stream.

Continuing your walk, the *Levada* will take you alongside pastures, through woods and across bridges of a considerable height, built over the steep valleys of the main water lines. After you pass the first bridge, you will find some holes on the slope, maybe built as shelters from the rain for the workers that built the *Levada*.

After another significantly high bridge, you must cross a tunnel that was dug through a thick layer of pumice stone, that abundantly accumulated here, as in several locations in the flank of this Caldeira volcano. The tunnel isn't too long, but the duct in the middle of the floor forces people to walk along its sides, dragging their bodies against the walls, which might have some consequences. Out of the original four tunnels, the first of them is the only one left. The others must have disappeared in the great landslides that took place in this footpath some hundreds of meters ahead. After the tunnel, you will find one of the deepest rivers and arched bridges, where we can see again the modern structures of wood and steel that have been adapted to these old aqueducts, to allow a safe and easy crossing.

Again on the pasture you will find, here and in several places along the way, a sequence of small slabs placed at intervals over the duct. They served to help the progression of those with the mission to verify the *Levada*, they serve now for those who walk it for recreational purposes. They were made to be walked on, but some caution is necessary, seeing that some of them are several tens of years old.

The *Levada* is in bad condition and totally disappears when we cross the wide valley of the main tributary of the Funda's stream, where a large landslide, caused by the 1998 earthquake, forces the pedestrian to take

a detour, only possible using the steps, ladders and handrails installed in the slopes.

You start by going down a first stairway, that is followed by a ramp of quite loose pumice stone, that requires all your attention. At the end you will turn left, going up the river's valley. You will pass some water ducts, stacked PVC pipes, and you will arrive at a small plaque that informs the traveller about the formation of the landslides. On the opposite side, a few tens of steps were installed to take you up to find the *Levada* again. A little up ahead you have a new set of stairs to overcome another landslide, smaller this time.

Continue walking and you will find one of the pipes that took water to the duct still serving its purpose. From there, as you go along, the *Levada* shows a bigger water flux, that increases with more water coming to the duct, giving a more pleasurable feel.

It is possible that you have the opportunity of seeing or hearing some of the local species of birds, such as the *Scolopax rusticola* or the *Regulus regulus inermis*. It will be easier to see other species of birds like *Turdus merula azorensis, Fringilla coelebs moreletti* or *Passer domesticus domesticus*. In respect to the flora you will be able to appreciate several communities: *Laurus azorica, Frangula azorica, Ilex perado ssp. azorica, Vaccinium cylindraceum* and *Juniperus brevifolia*. Followed by *Myrsine africana*, the *Luzula purpureosplendens, Equisetum telmateia, Daboecia azorica* and some individuals of the little *Platanthera micrantha*, an endemic orchid of the Azores. How one could expect from a humid and shadowy trail like this one, you can see a great variety of ferns, standing out for their size the *Dryopteris azorica, Woodwardia radicans* and *Osmunda re-*



VARADOURO HYDROELECTRIC POWER PLANT

In the fifties, in the last century, a hydroelectric power plant, that would be fed by the water coming from the north and west slopes of the Caldeira, began to be planned and built in Varadouro. To this end, a "U' shaped channel was built. That water-course with cement walls and floor received water (through cement and later PVC pipes) from different locations of the hillside upstream. The water was led to a 1000 m³ reservoir and, through a pipe, from there to Varadouro Hydroelectric Power Plant. After four years construction, in 1964, the plant and the water-course (about 9,5 km long, built at 680 metres altitude) are inaugurated. The energy produced started to feed a medium voltage line that took it to Horta city. Because of the small output and of the frequent interruption of the stream by natural factors, production was suspended in 1980. It was reactivated in 1988 but the seismic crisis that ravaged Faial island in 1998 reduced the water supply, making production fall under 1% of all the electricity produced in Faial.

PR3 FAI Levada

galis, as well as fabulous moss blankets. You will see that some sluices appear at intervals along the *Levada*. They were used to redirect the water from the duct to allow the maintenance of sections downstream. In the several water lines coming down the hillside it was necessary to find solutions to prevent damage to the channel caused by the varying flow of their streams.

You arrive at Caminho do Brejo, the only road for motor vehicles under which the *Levada* passes. Up to here you have walked a little more than 4,2 kilometres, you have still 2 kilometres to go before you reach the reservoir to where this duct goes, in the section that it is better maintained. You are now inside the *Protected Landscape Area of the Central Zone*. You will find the most emblematic bridge of this *Levada*, because of its dimensions and because of the view one has over the valley from it.

Soon you will arrive at the tank or reservoir. Here the waters of the *Levada* are separated from the debris they carry, filling this big retention tank that feeds the hydroelectric plant.

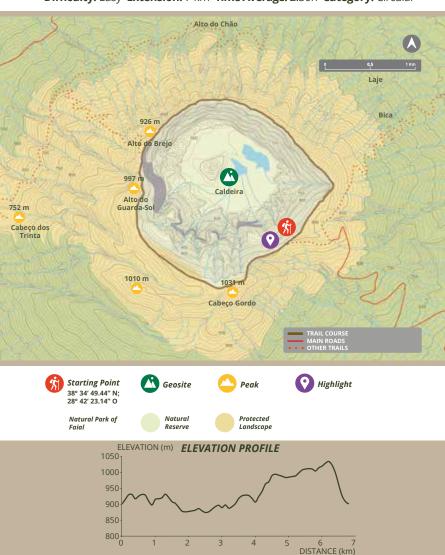
Continue your way by going up the lapilli path in front of you until you get to a fork in the road. Take a detour, turning left, to visit the Cabeço dos Trinta. You start by going up the forest trail, to leave it higher up and follow a path through the vegetation, that will take you to an unexpected tunnel that goes through the hill, to the inside of its crater. You can go through this tunnel without light, but be careful because the floor is irregular. Once inside follow the side paths, turning right and descending to the outside through the crater's edge. Now walk down the path to the right, coming back the same way you climbed and finishing the meters left until the end of the footpath.





PRC4 FAI Caldeira

Difficulty: Easy Extension: 7 km Time Average: 2:30h Category: Circular



PRC4 FAI Caldeira

In this footpath, the goal is to go around de Caldeira, through a well signalized trail. Seeing that other pedestrians are frequent, we are always perfect oriented as to the places we are going to pass next. The big safety issue is not to do this trail if it is foggy, also because probably you will not be able to enjoy what it has to offer.



When you reach the end of the access road to *Caldeira*, before you start this trail, you can read the informative panel, that holds precious information about this magnificent geological structure and related habitats. The footpath *PRT FAI - Caminhos Velhos* ends here and the *GR1 FAI - Faial Costa a Costa* passes through, coinciding with the first half of this tour around the *Caldeira*.

PRC4 FAI Caldeira

Even though this is a circular path, we advise you to do it in the anti-clockwise sense, starting the trail through the right. A look to the exterior shows you the hillsides of this *Caldeira* that go down to the sea and the majestic Pico island in all its length. The way is clearly marked on the dirt ground by the footsteps of visitors. If it is the summer, you will be able to appreciate a real aestival boom: the white of the panicles and of the ears of the *gramineae*, of the clovers and of the *Centaurium scilloides*; the yellowish flowers of the *Lotus*, of the *Parentucellia and* the *Lysimachia*, the purple of the *Prunella* and of the thymes, with many other colours and species in the mix.

Of all the species that inhabit the top of the *Caldeira*, it will certainly be possible to observe the *Leontondon filii*, *Euphorbia stygiana*, *Tolpis azorica*, *Lysimachia azorica*, *Juniperus brevifolia* – shaped by the ascending wind, *Vaccinium cylindraceum*, *Hypericum foliosum*, *Ranunculus cortusifolius*, *Erica azorica*, *Daboecia azorica*, *Ilex perado ssp. azorica*, *Holcus rigidus*, *Angelica lignescens*, *Myrsine africana* and *Festuca jubata*. The endemic moss *Breutelia azorica* forms dense tufts next to the balls of thread shaped webs that the endemic spider, *Pisaura acoreensis*, makes with curled leaves. Above all of this flies the *Hipparchia azorina*, an endemic butterfly with an appearance that makes any layman think of common moths.

The outer hillsides of this volcano are covered in semi-natural pastures, sometimes limited by hedges of *Cryptomeria*, *Hydrangea macrophylla* or native species that use the topography to form mosaics. Actually, *Caldeira* is the most important biological reservoir of the island. On the inner slopes, where the cows do not arrive, the hillsides show multicoloured mountain meadows, sometimes with patches of *Sphagnum sp*.

Occasionally the path splits in to two parallel trails, separated from each other by two or three metres. We encourage you to always take the higher route, to not to miss the beautiful views to the exterior of the *Caldeira*.

You might have to share the path with some nice, multicoloured, alpine cows, that graze freely around here... in the most improbable places.



CALDEIRA

This geological structure is the result of the biggest eruption that helped to build Faial island. Of a trachytic nature, it formed a large volcanic structure that, in its final or post-eruptive stage, suffered collapses and landfalls in the inner walls and top edges of the crater, creating the empty space we call Caldeira. The evolution of the materials deposited in the bottom has rendered the surface and the soil impermeable enough to hold little ponds in the rainy season. It is likely that they won't have free water in the moment you are doing the trail, but the importance of these ponds caused the Caldeira to be listed as a RAMSAR site since 2008.

PRC4 FAI Caldeira

Some signs, made of tiles, fixed upon cement stands, scattered throughout this part of the trail, offer you interesting information. The first sign shows you the location of Graciosa island so that you can admire it. The second tells you that you are still in Salão parish, though on its upper limit. The third, that you're already in Cedros parish, to which the *Caldeira* area belongs to, because the longest extension of the perimeter of its rim is in the territory of this parish. At the bottom of the *Caldeira* you will see a little volcanic cone, from a later eruption.

Arrived half way, we have in front of us the alignment of volcanoes (cabeços) that made the island grow, the last of which is the Capelinhos volcano. Great part of what you see is ranked as Protected Landscape Area of the Central Zone.

You start to see the deep *grotas* (=ravines) dug by the erosion into the pumice stone of the outer slope. You approach the triangulation pillar of the Alto do Brejo. Ahead, in front of the Alto do Guarda-Sol, above the trachytic dome called Altar, the inner slopes seem to have been ploughed by machines. You pass a little building in ruins... maybe a shepherd's shelter... and you enter the asphalt road that will take you to the top of Cabeço Gordo. When you pass between the two largest antennas there, take the opportunity to get one last image of the landscape. You can already see the parking lot... go down there.





PRC5 FAI

Rumo ao Morro de Castelo Branco

Difficulty: Easy Extension: 4 km Time Average: 1:30h Category: Circular



PRC5 FAI Rumo ao Morro de Castelo Branco

We start this trail on a secondary way in the village of Lombega, Castelo Branco's parish, next to a bus stop. Be careful to notice the footpath's start panel, not highly visible for who is coming from Horta.



We start by going down a dirt road, easy to walk on, but a little dusty, accompanied by the modest stream of Lombega to our right. The exposed banks show the yellowish pumice material that created the soils of this part of the island, used in the summer to grow forage maize, sweet-potato and the pastures that make them useful during the winter. Around here it is possible to observe some buzzards gliding, maybe trying to spot some young rabbit.

After a couple of minutes descending we pass by the first water tank. Stop to get the first glimpses over the *Morro de Castelo Branco* and, to your right, the tall, long cliff that ends far off in Varadouro, forming a large bay. Going down towards the coast, you will pass close to the Gruta dos Anelares entrance. This lava tube, with only 35,5 metres in total length and 3,7 metres of maximum inner height, contains ring shaped stalactites, a rare occurrence in Azorean caves that give this one its name. Visiting is conditioned and should not be done by pedestrians.

PRC5 FAI Rumo ao Morro de Castelo Branco



Arriving at the coastal cliff, start to turn left, continuing through a pass where certainly you will see many japanese beetles (*Popillia japonica*) resting on the leaves of plants. Despite its vibrant colours, this insect is actually a pest that arrived in this island some years ago and that causes some damage to agricultural crops. This cliff is in the Varadouro - *Castelo Branco Protected Area for Habitat or Species Management*, an extensive coastline of 99 ha that possesses natural conditions of interest for the development of specific habitats for species of flora and fauna.

Continuing, you will arrive to the path through which the cars get here. There, a small open-air auditorium type structure was created, where you can rest, while contemplating the geological details of this imposing rock and the beautiful panoramic views, either to the side of Varadouro or to the side of Castelo Branco's harbour.

Climbing to the top is forbidden, besides being totally inadvisable



MORRO DE CASTELO BRANCO

It is a trachytical dome with vertical cliffs with some small caves, connected to the land by an isthmus that forms a boxed bay of some depth, as you can see by the blue of its waters. The hill is included in a protected area of 16 ha called *Reserva Natural do Morro Castelo Branco Hill Natural Reserve*, being an important place for sea birds to nest.

PRC5 FAI Rumo ao Morro de Castelo Branco

due to the dangers that it entails. Be happy just to admire it and to listen to the sound of the *Sterna hirundo* that nest in the small cavities of the bare rock in the summer. Around here we can still see birds like the *Calonectris diomedea borealis*, *Columba palumbus azorica* and the *Puffinus baroli baroli*. With regard to flora, little patches of *Erica azorica* share the space with a meadow of *Festuca petraea* intensely invaded by other opportunistic species, that didn't exist in these islands before man got here. It is still possible to find *Picconia azorica*, *Spergularia azorica* and at least one population group of *Myosotis maritima* protected by a fence.

On the ground, there are concrete lids. The electric current that feeds a signalling light that was placed on top of the hill, to help the air traffic heading for the airport, passes through here. Go up until the last lid, where the yellow of the pumice deposits gives place to the floury whitish of the altered volcanic rock. The outline of the coast shows the typical rugged basalt stone from denser lava flows with scoria materials.

If you saw any vehicle parked in the parking lot, you can be sure its driver didn't go uphill, he probably went down the hill through a dangerous access on the cliff, down to the bay's pebbles to the left of the hill, using some heather plant, a rope with knots, little prominent rocks and a lot of self-confidence. I admit that, with some surprise, I saw fishermen doing this descent.

Go back through the path, following the electricity poles and soon you will arrive at the road, next to the Império da Lombega. If you brought your own vehicle, follow the road until you reach the place where you started this footpath.





PR6 FAI

Dez Vulcões

Difficulty: Medium Extension: 20 km Time Average: 7:00h Category: Linear



This hike starts at an altitude of 900 metres, in the *Caldeira Viewpoint* and ends by the sea, at Porto Comprido. When you reach the end of the access road, before starting the trail, you can read this footpath information panel, as well as the *Caldeira* footpath's information panel, seeing that both trails coincide through the first half of the tour around *Caldeira*.

Begin by going around the crater, anticlockwise, starting the path to the right. A look to the exterior will show you the hillsides of this *Caldeira* that go down to the sea and the majestic Pico island in all its length. This geological structure is the result of the biggest eruption of all that helped to build Faial island. Of a trachytic nature, it formed a large volcanic structure that, in its final or post-eruptive stage, suffered collapses and landfalls in the inner walls and top edges of the crater, creating the empty space we call *caldeira*.

The way is clearly marked on the dirt ground by the footsteps of visitors. If it is summer, you will be able to appreciate a real aestival boom: the white from the panicles and the ears of the *gramineae*, of the clovers and of the *Centaurium scilloides*; the yellowish flowers of the *Lotus*, of the *Parentucellia* and the *Lysimachia*, the purple of the *Prunella* and of the thymes, with many other colours and species in the mix.

The outer slopes of this volcano are covered in semi-natural pastures, sometimes separated by hedges of Cryptomeria trees, Hydrangeas, or native species that use the topography to form mosaics. Actually, *Caldeira* is the most important biological reservoir of the island. Here we find many species of the Azorean natural flora, among which stand out tens of endemic plants. On the inner slopes, where the cows do not arrive, the hillsides show multicoloured mountain meadows, sometimes with patches of *Sphagnum sp.*.

Occasionally the path splits in to two parallel trails, separated from each other by two or three metres. We encourage you to always take the higher route, to not to miss the beautiful views to the exterior of the *Caldeira*.

Some signs, made of tiles, fixed upon cement stands scattered throughout this part of the trail, offer you interesting information. The first sign shows you the location of Graciosa island so that you can admire it. The second tells you that you are still in Salão parish, though on its upper limit. The third, that you're already in Cedros parish, to which the Caldeira area belongs to, because the longest extension of the perimeter of its rim is in the territory of this parish. At the bottom of the Caldeira you will see a little volcanic cone, from a later eruption.

Arrived half way, we have in front of us the alignment of volcanoes (cabeços) that made the island grow, the last of which is the Capelinhos volcano. A large part of what you see is ranked as *Protected Landscape Area of the Central Zone*. You start to see the deep *grotas* (ravines) dug by the erosion into the pumice stone of the outer slope. You approach the triangulation pillar of the Alto do Brejo and you start to see the lapilli

path that climbs towards the Cabeço Gordo. Leave the *Caldeira* ridge and go down this way. Besides the landscape, you can admire the green hillsides speckled with yellow, because this color is common to most of the natural species of flowers that cover the mountains of these islands: *Tolpis azorica*, *Leontondon* sp., *Hypericum* sp., *Lysimachia azorica* and *Potentilla erecta*. A lot of ferns like *Huperzia* sp. mingle with mosses and other herbaceous plants, to form the final picture. Down below, the Cryptomeria trees follow the turns of the road.

If it wasn't for the signals there, you might not notice that this Caminho do Brejo is going to pass over an irrigation channel (*levada*). It is there that you should leave it and turn left, finding the channel and following it for about 2 kilometres until you reach the reservoir to where this duct goes, in the part where it is better maintained. You will find the bridge, notable for its dimensions, but also for the view of the valley, that shows a display of trees of the Azorean endemic flora. Soon you will arrive at the tank or reservoir. Here the waters of the *Levada* are separated from the debris they carry, filling this big retention tank that feeds the hydroelectric plant. Once arrived here, continue your descent, through the path where the pipe that brings the water from the reservoir to the hydroelectric plant is buried. When the pipe becomes visible prepare yourself, because you will have to undertake a very slippery descent... even with the steps made from wood logs, through a forest of luxuriant trees. You get out on the stream of Cabo forest path. Turn right, walk



CAPELINHOS VOLCANO

The surtseyan-type volcanic eruption that formed Capelinhos Volcano is an integral part of Capelo's volcanic complex, standing at the end of a NW-SE oriented alignment of volcanic cones. The manifestations that originated it were first observed at 7AM, on the 27th September 1957, by the whale watchman José Soares da Cunha, having stopped on the 24th October 1958. There was no loss of human lives, but the eruption and the seismic crisis associated with it, destroying homesteads and making agricultural fields and pastures unusable in the neighbouring parishes, because of the emigration to the United States and Canada that ensued. contributed to a population loss of about 35%,

The strong erosion felt throughout the last 50 years has already reduced this volcano to about 65% of its original area. However, this is still an active volcano: located in the north zone, a volcanic vent releases water vapour and toxic gases at high temperatures.

for 150 metres then turn left in the pasture. When you reach the lapilli path, go straight for 400 metres and turn left towards Cabeço do Fogo. After you have enjoyed the view from this hill, go down until you reach the road near the "Casa das Lavadeiras", a construction that includes a cistern, some sinks and a shed, that was ordered built by the Dabney family. Across, on the opposite side, there's a junction with a secondary path that you should follow, making a big "L" with a turn to the right, of 800 metres plus 900 metres, until you reach Capelo park. During this section, across a wood of *Morella faya*, *Pittosporum undulatum*, *Picconia azorica* and pine trees, always choose the wider path.

When you reach the park, don't miss the opportunity of visiting the "Typical Rural House", an exceptional recreation not only of the buildings, house and annexes, but of all the objects that usually were in each room. For those with a keener interest in ethnography, there is more than enough reason to take some minutes to learn or remember. However, you can only do it from 11am to 12am or from 1pm to 2pm. Afterwards of course you can visit the deer's enclosure or use any of the facilities that the park offers visitors. You pass by the rest-rooms, cross the park's picnic area and you will find a path to the right that could take you back to the *Levada*, but you should go straight ahead, then turning left until you enter the village of Capelo. When you reach the main road, you should cross it to continue on the trail that leads to Cabeço Verde. After climbing 150 metres on the asphalt, go left through an access to agricultural fields, coming out higher above on the red lapilli path. Turn left and continue.



On one side, the Morro de Castelo Branco starts to mark the coast line, on the other, the Cabeço Verde, with its antennas, challenges us. You will find an asphalt road to reach the top of this hill, but you will climb only half of it, about 750 metres, enough to reach the beginning of the forest path that goes down to the Furna Ruim and Caldeirão. You start going down using a staircase with roughly crafted handrails, among Ilex perado ssp. azorica, Picconia azorica, Vaccinium cylindraceum, Hypericum and Woodwardia, realizing that, to your left, the Pittosporum undulatum covers something dark and deep... the Furna Ruim. A small viewpoint allows you to discover a part of this creation of nature. The size of this ravine, with steep and deep slopes is frightening. Right there, some moss belonging to the Neckera intermedia species, not frequent in the Azores islands, forms expressive curtains that cover and hang from the branches.

Continue under the incense trees for 20 metres and you will see the path splitting in two, though in reality they are the same that goes around the Caldeirão. This time go to the left, by the more shadowy part. When you reach the sunlight again, you will find a little viewpoint to your right. The crater called Caldeirão stands at your feet and the hill in front of you is the Cabeço do Canto, your next goal. In the distance, the Capelinhos volcano starts to show itself. Going around the Caldeirão, go down through a path, that is sometimes steep, until you reach the trail.

Obeying the signals, cross the path and start a new climb to conquer the Cabeço do Canto. Go up through the tall *Pittosporum undulatum* and *Erica azorica* bush, that cast shadow on some *Myrsine africana* that overgrow the path and to some rare *Pteris incompleta*: ferns that show the peculiarity of having their leaves subdivided at the base (a characteristic exclusive to this species, at least in the Azores). Prepare yourself; because the final climb of this Cabeço is steep and on slippery ground, despite the help of some wooden steps. When you reach the top go around the summit through the right, among the *Erica azorica* that form a path, over a hard ground where practically nothing else grows. When you reach the triangulation, pillar placed on the 346 metres altitude mark, you will have an exceptional panorama of the Capelinhos volcano and of the lighthouse that saw its rise... Don't forget to photograph them.

Start the descent through the western flank of the Cabeço do Canto, passing first by an area with less vegetation. Go down by a sinuous path until you reach the motocross track, easily recognizable by the relief and the barren ground, peculiar to this kind of venue. Arrived here, turn left following the vegetation until you find the path that will lead you to the road. On the way find an abandoned whale watching station. These buildings, with privileged points of view, allowed some comfort for those who looked to the sea for the presence of sperm-whales, using only a pair of binoculars and flare-rockets to give out the "Whale in sight!" sign.

You reach the road, cross it and continue on the ash carpet that sometimes makes the ground unstable. You will walk until the *Costado da Nau*, the old coastal cliff where the island used to end, before the Ca-

pelinhos volcano made the island grow. Go down the trail, passing by the remainders of an old whale watching station, continuing until the Capelinhos Volcano Interpretation Centre, a mandatory visit, and you can also climb the old lighthouse that used to mark the land's edge. The Capelinhos Volcano Interpretation Centre, inaugurated in August 2008, has various permanent exhibits, informative and instructive films in 2D and 3D and a rich collection of geological samples. Remember or learn how the Earth and the world's main volcanoes were formed, until the birth of the Azores islands and specially Capelinhos, that marks the landscape in front of us.

After the visit to the Interpretation Centre, go down to the waters of Porto Comprido (the harbour that stands on Ponta Comprida) from where people would go out to sea for fishing or whale hunting, finishing your trail here.

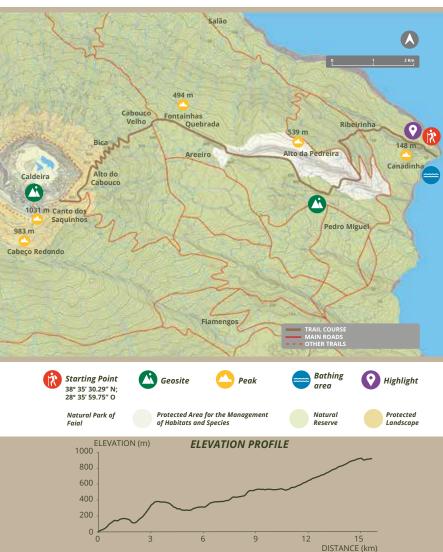




PR7 FAI

Caminhos Velhos

Difficulty: Hard Extension: 15,5 km Time Average: 5:00h Category: Linear



PR7 FAI Caminhos Velhos



The beginning of this path is at Boca da Ribeira, beside the sea, and it ends at an altitude of 900 metres in the *Caldeira* viewpoint. Information panels, that you should read, were placed in practically all the most interesting highlights locations.

The only access to the sea in this Ribeirinha parish is here, where the river that gave it its name flows into the ocean, and where need demanded, in the past, that a harbour was built. Here there was also a roof-tile industry, thanks to the proximity with the clay pits where the raw material came from. The site has also a cultural interest because of the roof-tile ovens, reconstructed in 2007, that is added to its recreational and social interest. The locals meet here each year to celebrate Saint Peter in a small chapel with the initials S.P. in its façade, in a festival that, besides the religious activities, usually includes dances, sporting events for the younger and a barbecue for everyone. There is good equipment to do it. A pool, built in 2011, greatly improved the sea bathing, that before was only possible in Varadouro. Even though this is a "beach without surveillance", it has a shower place and a camping site.

Currently there is an asphalt road to the Boca da Ribeira, but the trail that we are doing starts by going up the old dirt path that served the harbour, between the ribeirinha (stream) and the foot of the Lomba dos Espalhafatos slope. The entire slope is dressed in a forest typical of these dry soils, where the small trees *Morella faya*, *Pittosporum undulatum* and some *Erica azorica* prevail, along with *Arundo donax*, *Cyrtomium falcatum* and, strangely, a lot of *Psidium cattleyanum* in the mix. Further ahead, a simple and steep staircase to the right climbs through those woods, taking you to the top of the hill. Once there, it is impossible not to notice the *Ribeirinha Lighthouse*.

Climb a few meters on the asphalt road and go back in to the vegetation for another section of trail under the shade of the forest. You get out in a segment of the road that has now been planted with species of trees of this island's natural flora, near the Ribeirinha Viewpoint, at an altitude of 190 metres. The landscape undoubtedly deserves a stop.

PR7 FAI Caminhos Velhos

Leave the viewpoint and go down the hill, in a path like the one that brought you here, maybe even more shadowy because of the vegetation, that only here and there allows the sunlight in. At the end of that descent you will arrive once more at the valley of the river called *ribeirinha*, next to the Valado bridge, a spring collected in the river's valley where the people of old used to say that "springs a water that surpasses gold, by its taste and purity". The stone works that have been done here make it a more pleasant place.

Climb a little further, until you reach the path, turning right and going about 50 metres until you find, to the left, the new side-path. Get ready to climb the Lomba Grande. It is 430 metres until the main road. Here, to the left, you will find the continuation, with a climb of 650 metres more, until one of the paths on the top of the hill. This Caminho da Rocha Vermelha is one of the steepest and more physically demanding climbs of the trail, through paths that are sometimes wide enough for an ox cart to pass or sometimes narrower, just enough to let a man pass with his donkey.

On the secondary path where you came out, in the top of the hill, turn left and walk for about 990 metres, part on lapilli ground, part on asphalt, ignoring the ramification you will find to your right. You are in the Lomba Grande *Protected Area for Habitat or Species Management*. On the first sharp curb that you will find, go straight, entering the woods. Get ready to go around the hill and then descent through the old *Caminho da Vila* (Village's Path). It's an easy segment, with one or other big boulder that rolled onto the path and with the vegetation making a quite closed canopy. After you pass by some large arboreal ferns, you will finish the descent in the pastures. Besides cows, you will pass by a pig pen before reaching the asphalt road. Turn right, walk a couple of metres and go into the dirt road to your left. You will walk about 1,75 kilometres along this rural road before you reach the *Charcos de* Pedro Miguel Ponds.



RIBEIRINHA LIGHTHOUSE

It was working for 79 years, between 1919 and 1998, when it was deactivated as a result of the serious structural damage caused by the earthquake of July 9th of that year, that struck Faial island with intensity. The damages to the building that housed the lighthouse keepers and their families, as well as to the square brick tower, covered in blue tiles, that housed the lantern (the red part) and the optics (the crystal's part) with its powerful lamp, are still visible today. The Friends of the Lighthouse Association intends to preserve and rebuild this important historical mark of the parish and of the island.

PR7 FAI Caminhos Velhos

Located in the Pedro Miguel's graben, these depressions that you see on the ground are dry in the summer but fill up with the first rains, forming large ponds that last through the winter and spring periods. As you can see from the birdwatching station, built in 2012 by Faial's Natural Park, this is the best spot in Faial island for birdwatching enthusiasts, that come here to register or observe the passage of migratory birds, mainly during the winter months. *Anas crecca*, *Anas acuta* and other ducks, the *Plegadis falcinellus*, egrets, some wader birds and other species that use the Azores archipelago to feed and rest, but also some "rarities", stand out.

Go straight ahead, walking 1,5 kilometres more of this rural road going along the Lomba Grande. As you progress, and because the altitude also increases, some of the natural species of the Azorean laurel forest will appear along the ridges and road sides, namely *llex perado ssp. azorica*, *Vaccinium cylindraceum* and *Woodwardia radicans*, that mix with the *Hydrangea macrophylla* and *Hedychium gardneranum*. When you see a wind turbine, with its large propeller blades, up high, it is a sign that you will find to your right a shortcut that will take you once more to the top of the Lomba Grande, passing first through pastures, then through the woods.

You will reach the dirt path that goes along the top of the hill. It is 1,8 kilometres more that will take you through the Salão Wind Farm, installed in 2012, with five wind turbines VESTAS V52, of 850 kW each. This farm contributes with about 20% of the total production of electricity in the island. At the end of this path, turn left on the asphalt road and you will arrive at the Cabouco Velho Recreational Forest Reserve. This park can offer you drinking water, that you might consider providential, restroom facilities, play park and a barbecue area for those who wish to do it. The population of Salão's parish gathers here to celebrate Saint John. The park's forestry patrimony is composed of a collection of diversified species of exotic trees, mixing resinous and foliaceous plants.

You are now at an altitude of 500 metres. Leave the Cabouco Velho park turning right, walk a couple of metres on the road and turn right again, climbing through the Caminho da Caldeira until the end of this trail, at an altitude of 900 metres. After a relatively straight beginning, the path starts a serious of curbs, winding to the top. With each curb, the land-scape gets more dazzling, over a succession of hills and slopes that define geological faults. Throughout the climb you can see some curious circular tanks in the pastures. Before you finish this forest path, stop at Cabouco Viewpoint for a last look. From right to left we see the Espalamaca Fault, the *Praia do Almoxarife* parish's houses, afterwards the Fault of Rocha Vermelha, followed by the *Pedro* Miguel parish's houses and, lastly, the third and more evident, Lomba Grande Fault ... always with São Jorge and Pico islands framing the picture.

Resuming your walk, you come in to the Caldeira asphalt road, arriving at last at the Caldeira Viewpoint, about 200 metres from the one before, where the trail ends. From here you can go on to other footpaths.



PRC8 FAI

Entre Montes

Difficulty: Easy **Extension:** 3,4 km **Time Average:** 1:30h **Category:** Circular



DISTANCE (km)

PRC8 FAI Entre Montes

This path unfolds near Horta city, between Monte Queimado and Monte da Guia, reason why its called Entre Montes (between peaks). It is worth pointing out that this was the first footpath in the Azores with specific signals for *trail running*.



Go to the parking lot that serves Porto Pim beach, in the connection between Monte Queimado (scoria cone of sub-aerial origin) and Monte da Guia (surtseyan tuft cone of submarine origin). You will find two information panels, one of them with the general information about this footpath, as usual in the footpaths belonging to region's official footpath network, and another referring to trail running, considering that this was the first permanent trail run circuit of the Azores, with its specific signalling. So, this footpath complements the usual contemplative and leisure part with a sportive and competitive side, seeing that it allows athletes to have a permanent track to train before competitive events. It is worth mentioning that Faial was the great promoter of Trail Run races in the Azores, with an event called "Azores Trail Run", that had its first edition in 2014 and, since then, has been happening every year, usually in the end of May.

With Pico island to your left, follow the road for a couple of metres, until you reach the building where once worked the *Porto Pim Whale Factory*. Today, besides the exhibit that allows the visitor to know the artefacts of the old factory, it houses *OMA - Observatório do Mar dos Açores* (Azores Sea Observatory), a Science Centre dedicated to promoting activities to publicize Marine Sciences, namely those related to the azorean sea. It is worth saying that OMA organizes guided tours of the *Whale factory*.

Just after visiting the old factory, you have the Dabney's house, one of the several examples of the architectural heritage that belonged to the Dabney family, that settled in Horta in 1806, making a mark in the island's history with their presence, that lasted three generations in the 19th century. This summer house was part of an estate that included a home with a cistern, a jetty and shelter for two row-boats, a viewpoint and a small vineyard that spread through the slope towards Porto Pim bay. In the wine-cellar there is now an exhibit that shows the life story of the American family that came from Boston. It is worth mentioning that the Dabney family extended their influence in various areas, as: diplomacy – Unites States General Consul in the Azores and local conflicts

PRC8 FAI Entre Montes

mediation; businesses: increase of Horta's harbour shipping movement by importing and exporting wine, aqua-vitae, oranges, whale oil, supplies for whaling ships, supply of coal and ship repair.

After the Dabney's house, climb to the left up until the Lira Viewpoint, where you will have a first view over the bay, with *Fort of São Sebastião* on the opposite bank. The existence in this area of some maritime protection fortifications (16th and 17th centuries) caused this place to be called Porto Pim, a Flemish name that means "Safe Harbour". Continue for 100 metres and turn left among the *Erica azorica, Morella faya* and *Pittosporum undulatum* until you reach the road. Turn right and climb the stairway of the *Chapel of Nossa Senhora da Guia*, where you will reach the highest point of the trail, and probably you will be able to observe a great part of the island, as well as Porto Pim bay and Horta city. It is worth mentioning that Horta played a fundamental role in the history of communications between the European and American continents, seeing that it was an important mooring point of the old submarine telegraph cables.

Moving along, proceed to the left of the Chapel, towards the south-west tip of Monte da Guia. On the side opposite to the city, you can observe two volcanic craters called *Caldeirinhas*, with Pico appearing in the background. After you reach the south-west tip, follow the sign that tells you to go down through the right, continuing on the coastal path for 500 m, until you reach the Porto Pim Aquarium, where you will find some of the most common coastal species of the Azores sea.

On the next crossing take to the left, passing again by the Dabney's House and, when you reach Porto Pim beach, go to the left across the entire sand strip. At the end of the beach, turn right and go through the Rua da Rosa. 150 metres up ahead you will find the sign that tells you to turn right to Monte Queimado. When you reach the top of the hill, enjoy the scenery, specially Horta city and its marina, as well as Porto Pim bay and Monte da Guia. Go down the south slope of Monte Queimado through an improvised stairway of wooden logs, among specimens of the endemic *Erica azorica* and *Morella faya* until you reach the parking lot again.



PORTO PIM'S WHALE FACTORY

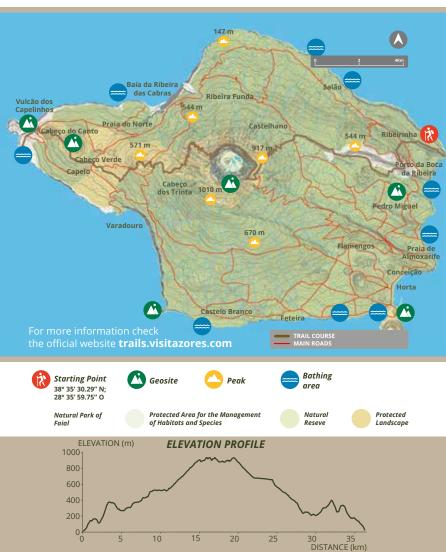
Industrial complex situated on the slope of Monte da Guia, on the south part of Porto Pim's beach, it was transformed into a museum, one of the best examples of the now extinct Azorean whaling industry, and it is essential to the comprehension of this activity in historical, economic and social terms. The Fábrica da Baleia's permanent exhibit includes almost all the original machinery and a vast collection of artefacts resulting from the intense whaling activity in Faial during the 20th century.



GR1 FAI

Great Route of Faial Costa a Costa

Difficulty: Hard Extension: 36 km Time Average: 12:00h Category: Linear



GR1 FAI The Great Route of Faial

The Great Route of Faial is a linear route that starts in Ribeirinha parish's harbour and ends in Porto Comprido near Capelinhos. This footpath is an East-West crossing that results from the combination of two small routes; *PR7FAI Caminhos Velhos* and the *PR6FAI Dez Vulcões*, that join at the Caldeira viewpoint.



It is of high value in terms of sightseeing and crosses the varied geological heritage of the island, from the older formations of Ribeirinha (800.000 years old) to the more recent formations of Capelinhos (historical eruption of 1957/58).

The first stage of the hike evolves around the main volcano-tectonic structure of the island - Pedro Miguel's graben, that shows a group of extensional faults, WNW-ESSE oriented, that give the ancient shield volcano of the eastern part of the island a topographic profile in steps. About half of the way, the walker has the chance to follow part of the contour of Faial's impressive Caldeira, 2 kilometres wide and 400 metres deep, that corresponds to the Caldeira of the island's central stratovolcano. The last stage of the footpath takes place in Capelo Peninsula, an alignment of more than two tens of volcanic cones that spread up until Capelinhos volcano, where the historical eruption of 1957/58 took place. The cinder cones that make this volcanic alignment show sometimes multiple or elongated craters, witnessing the fracture system active in the area, as well as volcanic pit caves, like the Furna Ruim. It ends at zero altitude, in the biggest and most important whaling station in the Azores between 1940 and 1957, Porto Comprido, deactivated in the aftermath of the Capelinhos volcanic eruption.

In respect to the flora, focus on some patches of native vegetation, Macaronesian bushes, laurel forest and Macaronesian Cedar forests, found in Capelo's Peninsula, in contrast with the desertified landscape of Capelinhos, where volcanic ashes prevail.





PR1 GRA

Serra Branca - Praia

Difficulty: Easy Extension: 9 km Time Average: 2:30h Category: Linear



Along with the hills of Serra Dormida that lie next to it, the hills of Serra Branca are part of a trachytic volcanic massif that was probably formed some 350,000 years ago.

Start by going around the *Caldeirinha do Pêro Botelho*. This volcanic pit cave, which is also known as *Caldeirinha* or *Algar dos Diabretes*, is one of the island's listed geosites. It extends along a spatter cone that is probably less than 11,000 years old. Access to the crater is easy as you can circle it by car. However, it is currently the only cave on the island that requires abseiling techniques and gear if you want to reach its interior. It was first explored in 1964 by the group *Associação Os Montanheiros*. It is 25 metres deep and features a small gallery at the bottom measuring 24.6 x 7.4 metres.



The landscape is stunning all around – the best that Graciosa has to offer. This is the spot that affords the broadest view over the island, with the great massifs of *Caldeira* (to the right) and Serra das Fontes (in front) catching your eye. To the left, you will be able to look down the slopes and see the low plain of the village of Guadalupe, which over the years was dotted with small volcanoes. The light tones of the cows and silage bales stand out in the pastures that are ever-present around here. You will pass by a lookout point that will also remind you that this island is a *Biosphere Reserve*, where people have sought to reconcile biodiversity with the sustainable use of ecosystems.

As a bonus, you will be able to see all the islands of the central group of the archipelago; the island of Terceira is next to the Caldera... but don't forget to turn around, because São Jorge, Pico and Faial are right here. In the air, common buzzards control visitors with their "meows," similar to those of other birds of prey that they are related to. This bird (*Buteo buteo rothschildi*) has become one of the symbols of the Azores and is even showcased in the region's flag.

Then you continue by hiking down the steep slope that leads to some old structures that were used for water extraction, as this natural resource was one of the major constraints that prevent the settlement of this island for some time.

During the summer, big wild carrots (*Daucus carota ssp. azoricus*) will keep you company during your hike. This endemic species gowns by the side of the road. In the background, you will be able to see the cluster of houses that makes up the town of Santa Cruz along with imposing and, I believe, centuries-old Norfolk Island pines that stand high above the bell towers of the churches.

Turn right into the Caminho Rural do Grotão, a rural road leading to pasture land where you will be able to see more closely multi-coloured cattle (black and white cows that are primarily dairy cattle and yellowish ones that are more commonly used for beef production) that lazily graze indifferent to the weather and to the steep terrain. The 398-metre-high hill Pico Timão is to your right and is covered at the top by the darker shades of the endemic shrub Azores heather (*Erica azorica*). At about 2,000 years old, the eruption that formed this hill and the associated lava are believed to be the most recent of Graciosa Island. In front of you, you will see the *Caldera* with its sharp edges. And suddenly to you left, where the hills of Serra da Fontes come to an end, the Islet of Praia emerges from the sea. That is where you are going, but there is still a lot to see.

Walk down the path Canada Jorge Nunes carefully since there are some loose cobblestones and you can trip over them. You will see some cerra-



FORNOS DE TELHA (ROOF-TILE KILKS)

Built in stone and only plastered inside, these somewhat cylindrical structures were divided in 2 floors that were accessed from opposite sides. The lower floor had a small opening through which firewood was loaded. In the upper floor, tiles were loaded through a larger opening. Separating the floors, but closer to the ground than to the roof, you would find long slabs of stone supported on the walls and joined in the centre, which was slightly raised and prevented tiles from falling. The hot air rose through the cracks left between these slabs of stone.

dos (plots of land bounded by walls made of loose stone) where people grow corn to feed the animals and you will hear some farming machinery in operation.

The ground becomes paved with concrete when you reach a very small but diversified wood featuring the Tasmanian bluegum (*Eucalyptus globulus*), the Australian blackwood (*Acacia melanoxylon*), the common fig (*Ficus carica*), the Australian cheesewood (*Pittosporum undulatum*), oak trees (*Quercus sp.*), poplar trees (*Populus sp.*) and apple trees (*Malus domestica*). All of these trees provide shade to the greater celandine (*Chelidonium majus*), which is named after its orange-yellow caustic sap used to make skin deformations disappear. Along the way, Indian shot (*Canna indica*) embellishes the sides of the path with its red and yellow flowers.

Back on the road, turn right towards Feiteira. This place is known as *Barro* Branco [White Clay] and it is not difficult to understand why... You just have



to look at the whitish slopes of deeply altered material that experts call the "trachytic structure of Feiteira." You will then be able to see the surrounding houses, including some old ones that feature stonework that is still visible on the facades and other significant architectural details that are typical of Graciosa, such as the so-called high and low houses with roof sections of different sizes, regardless if the eaves face the street or not.

Two white lines across the road do not always mean that you are before a pedestrian crosswalk; they may well be a sign that the local population has already adopted bullfights with a bull on a rope, which were imported from the neighbouring island of Terceira. Therefore, if you cross these lines during a festivity, you may put yourself at risk of being hit by a wild bull.

Next to a huge Norfolk Island pine, you will find a sign telling you to turn left towards Praia, which is just over 4 kilometres away.

You will soon realize that, despite it now being a side road, in earlier times this was the main link between Praia and Guadalupe. There is plenty of evidence along the way: the ruins of modest centuries-old houses that were not plastered and are now invaded by vegetation with holes in the eaves having been clandestinely transformed into dovecotes; doorways topped by large lintels of fitted stone that lead you to vegetable gardens and orchards, some of which have been restored and produce apples, oranges, plums, grapes, chestnuts and some tropical products, such as taro corms, cherry guavas, bananas and even pineapples. If you pay close attention, you will also notice other introduced species, such as laurel, rose bushes or huge camellias. Always turn left at every fork along the slope of the 620,000-year-old Serra das Fontes, where you will find fresh and reinvigorating shady spots. You can hear the doves cooing and the chaffinches, starlings and blackbirds chirping. Common buzzards also plane around here looking for small rabbits and rats. The Peruvian groundcherry (Physalis peruviana) can also be spotted along the stone walls that line this path; this tropical plant produces a small yellow berry that is sweet when ripe and that some people use to make jam or eat it raw.

When you begin to descend and reach a part of the path that can only be traversed on foot, you will notice that the terrain is lower to your right. This depression resulted from the extraction of clay in the past, but today you will most often see goats grazing. Further along, you will walk on exposed rock that features deep, equidistant tracks carved out by the continuous movement of ox carts that often carried the aforementioned clay. People assured me that there is also a cross carved in relief in the ground in memory of a person who died in an accident involving one of these ox carts that rolled over. I did not see it, but this is not surprising, because the ground is now covered with the leaves of eucalypts and vines, which did not exist here in the past. And this is the setting that will quickly lead you to the junction of this path (Canada do Nevoeiro) and the road.

A little further along, by turning left, you return to what is the continuation of this path (Canada do Nevoeiro), which is asphalted at the beginning and takes you to *Lagoa*. In the stone walls that sometimes hide orchards, you can hear the frenetic but invisible rustling of lizards. To

your left at the top, you can see the Quitadouro, which has been partially excavated for the extraction of black and reddish slag.

The New Zealand laurel (Corynocarpus laevigatus), a less common tree, displays its yellow ripe fruit to the birds that savour it as soon as possible. Further down, by the side of the path to the right, you will find the back of a tile kiln, a structure that is over 3 metres high and features an opening close to the ground. Mr. Juvaldino Espínola told me that this place here was known for its windmills, tidal wells and kilns that processed roof tiles, bowls, jugs and lime. All of this will give you an idea of the industrial nature of this place. There was a boat, known as the "O Barco da Telha", which carried tiles from Graciosa to some islands of the central group where they would replace the straw that covered many houses and barns. You will then pass by the Chapel of Santana, which is very old but was recently restored; its feast is celebrated on the 2nd Sunday of July with a procession and a few small musical performances. Continue towards the sea along the winding path. You will pass by some houses, all on the right side, and by an extensive rock massif behind them called Rochela, where vineyards grow and where you will find a guarry / crushing machine that serves the whole island. As you get close to the sea, there is a very tight bend where the *Passeio Manuel de Barcelos* Silveira Bettencourt Sea Promenade starts. It was opened on December 28, 2014, and it will take you to the village of Praia. This sea promenade was named after a notable industrialist who was born in 1916 and had a fleet of tuna ships that supplied what was then considered the largest and most modern cannery of the Azores, which operated from the long building that stands in front of the exercise equipment that you will pass by. The result of an underwater eruption, the ever-present *Ilhéu da Praja* stands to your left and features flat soil at the top covering an area of about 5.000 m². Easily accessible. it has long been a recreation area for the population of Praia that used to spend the day there.

There are holes in the ground or between the rocks in the *Natural Reserve of the Praia Islet*, where important migratory seabirds nest: terns (the 2nd largest colony of *Sterna dougallii* in the world lives here), the Cory's shearwater (*Calonectris diomedea borealis*), the Barolo shearwater (*Puffinus baroli*), the band-rumped storm petrel (*Oceanodroma castro*) and especially the Monteiro's storm petrel (*Oceanodroma monteiroi*), a seabird whose only known nesting colonies in the world are located on Graciosa Island, more specifically here on the Ilhéu da Praia and on the *Ilhéu de Baixo*, making it an endemic species of the Azores.

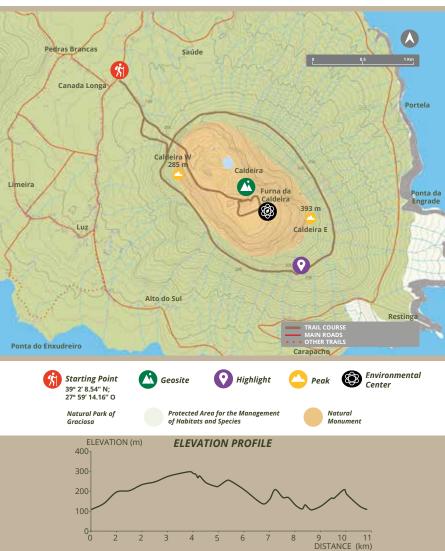
You will then arrive at the village of Praia, which is the second most important population centre of the island. A stroll along its streets steeped in history with centuries-old buildings and expressive and quite unique portuguese cobblestone is definitely worth your time. The Feast of Saint Matthew is held here on the 3rd Sunday of July. You can also enjoy a well-deserved rest by relaxing and bathing at the gray-sand beach or by sitting outdoors at one of the local restaurants or cafes. Do not leave the village without tasting its pastries, especially the famous *Queijadas da Graciosa* (*Graciosa Tartlets*) that are shaped like a star and are very sweet.



PRC2 GRA

Volta à Caldeira - Furna do Enxofre

Difficulty: Easy Extension: 10,8 km Time Average: 3:00h Category: Circular



PRC2 GRA Volta à Caldeira - Furna do Enxofre

This trail starts at the beginning of the path that leads to the interior of the *Caldeira* but that also allows you to bypass this volcano.



The path lies on rocky terrain that resulted from a pahoehoe lava flow that filled the interior of the *Caldeira*, forming a huge lava lake some 12,000 years ago that overflowed at two different points of the ridge. In one of these places, the lava flow created the Furna da Maria Encantada (*Enchanted Mary's Cave*) and the well-defined layout of this rocky terrain.

You will reach a fork where you should first choose to visit the interior of the *Caldeira* or its outer perimeter. Your decision may depend on the opening hours of the *Visitor Centre of Furna do Enxofre*. We suggest leaving the visit to the cave and to the interior of the caldera to the end. So, at this fork, turn right into the forest path Caminho Florestal das Furnas.

The rocky outcrops clearly visible on the right and the presence of caves in the vicinity are evidence of the aforementioned volcanic event that led lava to the south, covering much of the land where the Village of Luz now stands. The first of these caves, the 168-metre-long Furna do Abel, features two huge skylights by the path. A sign indicates the entrance to the cave, which you can visit. By continuing on, you will find on the left a reservoir called "Furnas", which is partly fed by the underground springs inside the 30-metre-long Furna d'Água, which is located a few metres above but is closed to the public.

Now begin to hike around this massif by turning left to the forest path Caminho Florestal da Caldeira, which starts out as a dirt path. Soon after, you will find a sign telling you to climb and visit the Furna da Maria Encanta-

PRC2 GRA Volta à Caldeira - Furna do Enxofre

da (Enchanted Mary's Cave). Climb about a hundred steps and, at the top, enter and traverse the lava tube and feel the wind blowing out. You will find the Caldeira at your feet, featuring a crater that is 1,6 kilometres wide (maximum diameter at the top) and 402 metres deep. It is decorated by a great variety of tree species planted by the Forest Service, which keeps a pleasant picnic park and some nurseries inside the crater. You can also see some pastures in the background and in some spots along the ridge.

Outside the cave, before you start descending, move your eyes from left to right, as this will allow you to travel from the Village of Luz to Pedras Brancas, having the hills of Serra Branca, Pico Timão and Serra das Fontes as the backdrop. You will also be able to see several of the traditional windmills of the island of Graciosa; some are in ruins but others still have their domes painted in the traditional bright red colour.

Back to the forest path Caminho Florestal da Caldeira, you will be surprised by the magnificent view over the Village of Praia, which is at first hidden behind the hill Pico da Ladeira do Moiro, featuring the prominent *Chapel of Senhora da Saúde*, but then comes into view. The *Ilhéu da Praia* stands out in the sea in front of you. The dirt path is paved with asphalt in some parts, and although common, the species on the sides of the path and on the slopes are sometimes big enough to provide shade, which makes them even more valuable. Further south, other islets emerge from the sea: the *Ilhéu dos Homiziados* (the largest) and the inaccessible *Ilhéu de Baixo* (its neighbour), both of which are guarded by the *Restinga Lighthouse*.

In the sea, in the distance, the islands of Terceira and São Jorge help integrate Graciosa into this archipelago. Further along, you will be able to see the buildings of the spa and bathing area of Carapacho. To the west, you will find the lookout point of Luz; opened in 2012, it affords a panoramic



LEGEND OF THE ENCHANTED MARIA

Maria and her husband were a well-to-do couple. They had lots of animals including a rooster that was a joy to hear in the morning. One day, at odd hours, the rooster started crowing repeatedly and in a different way as if saying, "Run! Run!" Maria thought it was a warning sign and urged her husband to get out of there. He refused and they ended up staying. A few days later, the earth trembled and a great eruption formed a volcano with a huge caldera and a cave appeared where Maria's house once stood. The whole family disappeared with the exception of Maria, who had believed the warning and forever after stayed there enchanted, herding her animals. Maria also had chickens... which were the seagulls. Dressed in rags and with dishevelled hair, she scared children away. At times, when the weather was good, one could see up in the hills the clothes that Maria had hung out and, when she baked bread, the smoke covered the whole Caldeira with fog.

PRC2 GRA Volta à Caldeira - Furna do Enxofre

view over the centre of its namesake village. The path Caminho da Caldeira comes to an end soon after.

Walk down the asphalt road to the aforementioned fork and, this time, turn right to enter the *Caldera*, a site that different entities have listed as a protected area. It is currently listed as the *Natural Monument of the Graciosa Caldera*, as a *Geosite* of the island of Graciosa and as a *Ramsar Site* (since 2008). You reach the *Caldeira* through a tunnel opened in 1953. Once inside, go straight to the *Furna do Enxofre*, with trees and large stone blocks fallen from the rocky slopes standing out in the landscape.

You will reach a small parking lot. Leave the path and go down the almost 200 steps that will take you to the *Visitor Center of Furna do Enxofre*. This building opened on April 5, 2010, and besides being the gateway to the cave and being prepared to receive and inform visitors, it also hosts the *Centre of the Biosphere Reserve* and the headquarters of the Natural Park of Graciosa. Visiting this spectacular volcanic cave is a must, as this *Natural Monument* is deemed to be a unique site in international volcano speleology.

In the final phase of the aforementioned eruption, the lava descended into the main conduit, leaving behind this cave. Experts say that this vaulted cave may have been formed by a pocket of fluid lava, with its current shape resulting from the readjustments that followed the drainage of lava.

The cave sits at an altitude of 98 metres and, to reach it, you need to go down the 183 steps of a spiral staircase located inside a 37-metre-high tower opened in 1939. Guided tours are only available when the necessary safety requirements are met. Sometimes the concentration of CO₂ in the atmosphere inside the cave is too high, which prevents people from visiting it. This huge cave formed by the last eruption witnessed by this *Caldeira* features several secondary formations and elements of the volcanic activity that shaped this island. Besides the 194-metre-long, 40-metre-high vaulted ceiling, there are small lava stalactites, a cold fresh water lake of considerable size and, next to it, a degassing field consisting of a mud fumarole and of dry gaseous emanations from the ground of the cave. You can also see columnar jointing on the ceiling and walls. This cave has been visited by illustrious scientists since the 19th century, including Prince Albert of Monaco, Ferdinand Fouqué and George Hartung.

Take the same route to leave the Caldeira. Before leaving, however, you will find a path that heads down to the forest park on the right near the tunnel. This path has no markings, but you will certainly enjoy this pleasant short walk that leads to a picnic area where you will find some animals and where the Forest Service keeps its nurseries. Finish this trail by returning to the starting point.

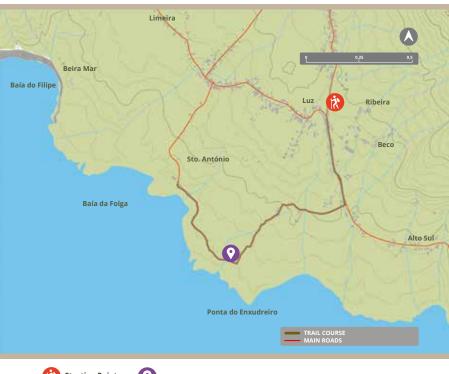
TRAILS OF THE AZORES



PR3 GRA

Baía da Folga

Difficulty: Easy Extension: 2,1 km Time Average: 1:00h Category: Linear

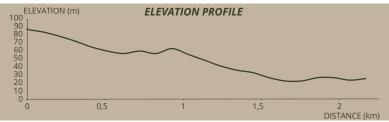












PR3 GRA Baía da Folga

This trail begins on the square 1° de Dezembro or Largo da Luz, as the local population prefers to call it, because it is the main social gathering point of the village of Luz. This entire trail runs along this village and covers only 2,1 kilometres, making it a truly small route.

This trail actually begins near some well-supplied stores that can meet some of your immediate needs before you start hiking. At the end, at the *Quay of Folga*, you will also find a bar/restaurant that is waiting for you and that may be convenient.

You leave the square Largo da Luz by walking down the main road towards Carapacho. Take a short detour to visit the *Chuch of Nossa Senhora da Luz*, which was consecrated in 1738. Back on the road, you will find on the left an old spout and water tank "where oxen drank," as someone told me.

If you look closely, door numbers on this island were made from the same mold and they are all in a great state of repair. These still glittering tiles were placed all over the island in the late 1990s... even in the most run-down houses.

To your right, forking off the road and featuring a STOP sign, you will first find a path used by farmers and then an old cobbled drainage ditch that runs along the road and that you will walk on for about 100 metres. You can no longer imagine the amount of rain needed to justify improving and maintaining this ditch, but it is a testament to the time when water carved out the watercourses that you can see on the island today. Nowadays, you will find it either dry or without a significant flow. There is a second path on the right that also has a STOP sign: Canada Nova. Take this secondary path but be advised that not even the concrete ramp at the beginning is "new."

On the right, there are some strange orange lichens on a stone wall that seem to like the sun, since they occupy mainly the sides that face the south. There are small plots with corn or vines that are now abandoned. A few years ago, Mr. João do Outeiro, who has since passed away, was the last person to live here and diversified agricultural production in this place by growing cucumbers and sweet potatoes. He told me that the area beyond his house was called Pedregulho and that it stretched as far as the path Canada dos Padres... which you will get to before turning left towards the sea.

Looking around, you realize the importance of vineyards in this area – much greater in the past for sure – and of *orchilla weeds* that grow abundantly on stone walls – far from the scarcity of bygone times. Towards the hills, you will be able see what is left of the windmills that also abounded around here. There is a constant background hum that seems to indicate the presence of beehives nearby.

Far away, the hills of Serra Branca feature the Ponta Branca rock, the highest coastal cliff of Graciosa that plunges 330 metres down an escarpment into the sea. There are those who claim that the island of Graciosa is known as the white island because of the whitish

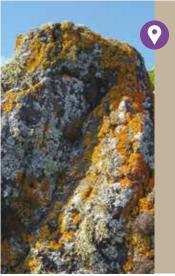
PR3 GRA Baía da Folga

trachyte of this cliff that is clearly visible to those who approach the island from the sea.

You will quickly reach the coast. Then turn right into a path lined by African tamarisks amid sparse and typically seaside vegetation. This unique habitat is influenced by the sea spray and features seaside goldenrods (*Solidago sempervirens*), spiny rushes (*Juncus acutus*), hawthorns (*Rhaphiolepis umbellata*) and some endemic plats, such as the Azores spurge (*Euphorbia azorica*) and the Azores sea-spurrey (*Spergularia azorica*).

When you are about to arrive at Folga, you can see the Quay of Folga from the best place to take a picture... Don't forget to do it! After passing by some storage cabins used by the important local fishing community, you will arrive at the quay that sits next to the sea restaurant, where Maria do Carmo will receive you every day from 10:30 am to 10:30 pm "except on Christmas Day," as she assured me. If you have time, then order a Caldeirada de Peixe (Fish Stew) or the famous Molho à Pescador (fish broth) with a touch of saffron to spice it up, but "foreigners and emigrants also enjoy my fried and grilled fish with a local sauce," she told me. It is up to you to choose and to taste it.

The trail finishes here, but if you want to return to the centre of the village of Luz, where this hike began, you will have to travel 1,370 metres along the only road that leads to this place, which was built in the 19th century given the importance of the local quay. During the climb, you will find a chapel dedicated to Saint Anthony that was built at the end of the 19th century and that you reach by climbing a stairway.



URZELA (ORCHILLA WEED)

It is the common name of the lichen Roccella tinctoria. With a brownish colour, it is commonly found on coastal cliffs and stone walls by the sea in the Azores. It produces a purple (or purplish blue) dye used to dye textiles. Flemish dyers imported the raw material from the Atlantic archipelagos and the techniques they used to extract the dye from this orchilla weed were a very well-kept secret for many decades. In the early period of the history of the Azores, this orchilla weed was one of the main exports of the islands and it was traded from the 15th to the 19th century. It had a great market value to the point that it became a royal monopoly, with severe penalties for those who smuggled it. Picking it was very hard, since it grew on cliffs and steep slopes, and some people died as a result of falls.

TRAILS OF THE AZORES



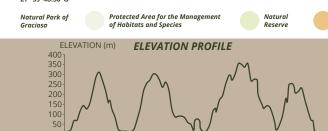
Monument

GR1 GRA

Great Route of Graciosa

Difficulty: Medium Extension: 40 km Time Average: 14:00h Category: Circular





8 10 12 14 16 18 20 22 24 26 28 30 32 34 38 40

DISTANCE (km)

GR1 GRA The Great Route of Graciosa

The Great Route of Graciosa traverses much of the island in a looped route featuring both the landscapes along the coastline, especially the various islets, and the volcanic landscapes of the interior of the island, covering approximately 40 kilometres.



This route is divided into two stages of approximately 20 kilometres each. The first stage connects the area of Barra (Santa Cruz da Graciosa) and the village of Luz and allows you to enjoy the island's east and south coasts. The coastline is less rugged in the area of Praia when compared to the steep, high cliffs of Ponta da Restinga, with the Natural Reserves of the Islets of Praia and Baixo and the Furna do Enxofre standing out along the way. You can also visit the most iconic volcanic landscape of the island – the Caldera, inside which you will find the Furna do Enxofre, a 40-metres-high and 194-metres-long volcanic cave that features a lake inside.

The second stage connects the village of Luz to the starting point in Barra and features the Caldeirinha de Pêro Botelho, a 25-metres-deep volcanic pit cave located in the hills of Serra Branca, which is a natural lookout point over a large part of the island. Along the way, you will also find the valley between the Central Massif and the Caldera Massif and the old ruts made by oxcarts in the Fontes area.

You should plan your hike according to your physical condition, interest and availability. There are places where you can stay overnight, especially some old windmills that were restored and are now used as rural tourism establishments.



TRAILS OF THE AZORES



PR1 FLO

Ponta Delgada - Fajã Grande

Difficulty: Hard Extension: 13 km Time Average: 4:30h Category: Linear



PR1 FLO Ponta Delgada - Fajã Grande

This is one of the most popular hikes in the Azores. However, if it is foggy or if it is highly likely that rain will fall or strong winds will blow, do not participate in it. It is a trail that requires particular attention and caution in some stretches, due to the fact that the uneven ground sometimes becomes quite slippery. The high variation of altitude in some of the stretches determines that it is **not advisable to people who suffer from vertigo**.

Leaving Ponta Delgada through the main path that leads to the lighthouse, you will find the small *Chapel of Nossa Senhora da Guia*. Make your first stop here to contemplate the João Martins islet and the island's northern coastline. Resume your walk covering 1,5 km of the asphalt path, without ever changing direction, until you reach the *stream of Moinho* bridge. Make your second stop here to admire this deep valley, where the abundant brownish waters wash, as well as they can, the white rocks from the riverbed and the trout that are said to exist here. Upstream, you can also see the ruins of one of the old mills; and, downstream, contemplate the Corvo island.

400 metres ahead, you will see a concrete path on your left, known as Estrada das Lombas, which you will have to go up later. For now, keep walking and cover 500 metres more until you reach the lighthouse at Ponta de Albernaz, a structure that has been displaying its light since



the 28th of January of 1925. Next to the lighthouse, keep going where the white wall extends towards the cliff and the *Maria Vaz islet*, classified as *Natural Reserve*. The flat pastures stretch to the astounding sea-beaten coastline. Ponta Delgada is located on the oldest lavas in the Flores island, with more than 2 million years of existence.

Turn around, and go back and up the abovementioned Estrada das Lombas, walking 1,5 kilometres more until you reach an altitude of 250 metres while enjoying the beautiful stream valley. There you will see a

PR1 FLO Ponta Delgada - Fajã Grande

sign to your right indicating the shortcut you can take. Start walking, for you still have 2,8 kilometres ahead of you before you reach the cliff overlooking the Quebrada Nova.

Some rocks were strategically placed here in order to even the trail's irregular outcrops, many of which naturally grown in the form of steps. In 5 minutes, you will already be crossing the rivulet to your right, continuing to go up this uneven path, where sometimes the sun does not shine. Approximately 15 minutes later, you will emerge in a wide road, more level and easy, flanked by the pastures. These are elements of the land-scape that will stretch until you begin descending the coastal cliff. You will cross streams with small waterfalls and mountain pools — where jumping frogs live — above which hang ferns and *Juniperus brevifolia* and *Frangula azorica* branches, and cover other tracks with better views, more cows, and some insects that insist on occupying the air around us.

By now you have already caught sight of the aforementioned *fajã* of *Quebrada Nova*. Looking straight in that direction, further back is the Ponta de Albernaz, the Maria Vaz islet, and the Corvo island — a unique opportunity for taking some pretty good pictures. Farther away from the shore, you can start seeing the Monchique islet, a real geographic milestone that marks the end of the Old World and opens the doors to the Western Sea. You are in the *Protected Landscape Area of the Central Zone and Cliffs from the West Coast*.

Walk about one kilometre more and, when you reach the 430 metres of altitude, you will catch the first glimpses of Fajã Grande. A few more steps and you start descending the cliff. Do it with extreme caution, because, despite the installed support structures, namely some steps and side protections made of tree trunks as well as a wooden staircase, maximum attention is required. The steep shortcut, with Z-shaped stone parts, good for trained legs, reveals itself at each turn, and so does the landscape. Further down you realise you have entered a "shell", formed by the imposing rocky walls, an apparently confined space, less steep, where vegetation predominantly consisting of *Pittosporum undulatum*



FAJÃ DA QUEBRADA NOVA

It was on the 9th of June 1874 that a huge landslide occurred in the cliff known as Rocha dos Fanais, a phenomenon which "filled more than 350 fathoms of sea far from the coast, more than 4500 metres wide, and 30 to 40 metres deep". This episode, known as the great landslide of Fanais, not only formed the corresponding *fajã* but also produced big waves in the ocean that swept the island's shores, creating a sea flood that was responsible for the death of eight people, according to written documents.

PR1 FLO Ponta Delgada - Fajã Grande

and high *Juniperus brevifolia* protects you from the sun. For a while, the only landscape is the woods surrounding you.

When you cross this enormous "step" of the cliff and descend a little bit, the path gets less demanding, taking you to the Ponta da Fajā, which you start seeing better after each turn on the steep rock. Some water runs down the slope, a fact that would make this footpath impossible to cover if it weren't for the human intervention. A conduit at the left side of the trail is an example of one of those interventions, made in order to channel water to the Ponta da Fajā. The Fajā Grande, with the Pico da Vigia behind, starts to seem closer and closer. It is possible that you come across some wild goats that survive in these rocks.

After the last curve, you will be able to see the Chuch of *Nossa Senhora do Carmo*. You enter the Ponta da Fajã through a dirt road that gives place to asphalt at a certain point. Partially affected by the cliff landslide on the 19th of December 1987, a phenomenon that destroyed a house, a chapel and a garage, the 50 inhabitants of the Ponta da Fajã were evacuated, against their will, semi-abandoning their proprieties. Not resigned to such decision, they ended up returning and reoccupying some of the houses, even though the number of permanent residents is now very low.

The Ponta da Fajã and the Fajã Grande bathing area (where this hike ends) are separated by approximately 1,8 kilometres of asphalt road, which, if covered by foot, allow you to admire a number of waterfalls, the last of which is the Poço do Bacalhau. In order to learn more about this waterfall and Fajã Grande, read the other two pedestrian trails that also converge at this idyllic place, where the sun and the sea meet.



TRAILS OF THE AZORES



PR2 FLO

Lajedo - Fajã Grande

Difficulty: Medium Extension: 13,5 km Time Average: 3:30h Category: Linear



9

5 6

3 4

12 13 DISTANCE (km)

Start you hike at the centre of the parish of Lajedo, next to the parochial church, with its holy water fonts and its two exotic large ormer shells at the entrance. Take the opportunity to visit it.

The Our Lady of Miracles feasts that take place here in mid-August are responsible for the largest pilgrimages that the island knows, a means the believers use as a way of returning the "graces" obtained.

Head to the *Casa do Espírito Santo* and walk a few yards until the last houses of the Lajedo are left behind and you reach a viewpoint, the spot where the nature trail actually starts. On your way there, some *Azorina vidalii* in the slope pose for the picture.

The well-maintained and landscaped viewpoint, located next to an old barn, allows you to distinguish the huge Cartário islet in the landscape, and, to the right, next to the sea, a bare rocky flagstone-like platform, which is in the origin of the name given to the parish — and was also used

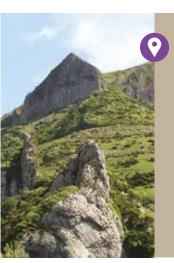


to make the landing easier at the Portinho do Lajedo, a tiny inlet contiguous to the platform. In this area, known as Baixa Rasa, the liner *Slavonia*, which had sailed from the United States towards Italy, ran aground on the 10th of June 1909, at dawn. Since it was only 25 metres away from the shore, all 597 people on board were evacuated and continued their journey on other boats. Also, many of the people's belongings were taken from the liner, and, in the months that followed, a great deal of the remaining belongings was brought to land, along with parts of the boat.

Now you have 3 kilometres and 3 long wide valleys overlooking the ocean and dotted with hard basalt outcrops ahead of you before reaching the parish of Mosteiros. Continue down the dirt road, and, when you reach the first fork, go left into a partially cobbled footpath. Ahead of you is the Pico da Terra Nova, with a rivulet at the bottom, which you will have to cross. After going around this peak, you will reach the stream of Lapa valley, and, soon after, you will find yourself walking on a stone bridge that crosses the river's main affluent. Go around another elevation, and once you reach the third valley — Ribeira do Fundão — you will be able to see a number of islets. You have just entered the Protected Area for the Management of Habitats or Species from the South and Southwest Coast.

At the top of the valley, considerably large basaltic veins, like stone sentinels, emerge from the green of the pastures. Choose wisely the stones you will be stepping on to cross the *stream of Fundão*. A steep slope will allow you to avoid 130 metres of uneven land, after which you will reach the asphalt road of Mosteiros. However, during this ascent, you will enjoy the best views of the imposing *Rocha dos Bordões*.

As for the origin of the name of this parish — *Mosteiro*, to the centre of which you are about to arrive — some say it is due to the numerous islets along the shore, while others say it had to do with the large rocky peaks away from the shore. The most distinctive peculiarity of the traditional architecture of Mosteiro is maintained in the approximately 20 stone arches that can still be seen in the ground floor doors (*lojas*) of some houses. Those arched doors were the entrance to the space where the farm implements and the oxcarts were kept. The need for a wider opening dictated the use of the stone arch, more stable and easier to build than the typical stone lintel placed at the top of the windows and remaining narrower doors of the house. According to the most re-



ROCHA DOS BORDÕES

It is a rare geological formation approximately 570 000 years old, and the most remarkable of its kind in the whole archipelago of the Azores, characterised by more than 200 enormous basalt prismatic columns vertically positioned, 22 to 28 metres high, along 100 metres of extension, and popularly known as "bordoes". The origin of this basalt disjunction resides in the quick cooling to which the thick drained lava is subjected. Located in the place called Cabo Baixo das Casas, in the parish of Mosteiros, this imposing and uniquely beautiful rock is one of the most emblematic landscape elements in the island. This Geosite in the Flores Island is classified as *Natural Monument*.

cent census, which date back to 2011, the five least populated parishes in the whole country are all located in the Flores island, and, among those, the one that has fewer permanent residents is that of Mosteiros, with only 43 inhabitants. So, do not be surprised if you don't see anyone to whom you can hello or ask for information.

Go down until you reach the Chuch of Santíssima Trindade, where a feast takes place on the third weekend of August. There you can refresh yourself in the fountain located in front of the building. Keep going down the Cabo de Baixo das Casas street until it curves to the right. Once you have reached that point, leave the asphalt and cover the concrete, passing by a well-preserved house with some Azorina vidalii — one of the most beautiful plants from the Azorean endemic flora — growing out of the holes in its walls. After crossing the bridge over the stream of Mosteiro, a stream where trout grow, you will find some barns harmoniously fit into the landscape, providing you with the opportunity to take some beautiful pictures of this rural scenery. Here you can also find butter factories that used to operate in the past.

Go up, heading towards the road, and walk 800 metres more. You will soon be able to see the Caldeira, a depression of fertile soil and running water that enabled the establishment of a small number of old settlers. Now completely deserted, there remain only a few houses that have not collapsed and serve the purpose of storing farming tools. Leave the asphalt road and make a turn to the left, entering an old footpath that passes next to the ruins of other houses swollen by the vegetation.



After leaving the road, walk 200 metres, leaving the Caldeira behind, and make another turn to the left, entering a trail next to a water reservoir — a trail that goes around a hill along the side facing the ocean. That hill is called Cruzeiro da Fajãzinha, and is one of the best viewpoints in this parish.

This shortcut will take you to the Ladeira do Portal: the oldest descent in the escarpment that for centuries was the only passable way that connected *Fajãzinha* to the rest of the island. It is usually more than 2 metres wide, and parts of it still have the original cobbles used to pave the path.

Here you wil have the first glimpses of the *Fajãzinha* valley, seen from above: a breath-taking and spectacular landscape, where the inland cliffs and several waterfalls grab our attention, as well as the *Ribeira Grande* river mouth, the largest and most dangerous in the whole island, transformed into a pebble beach, and, in the distance, *Fajã Grande*. *Fajãzinha* and *Fajã Grande* were, until a few decades ago, one of the most important fruit production areas in the island.

To enter $Faj\tilde{a}zinha$ you have to pass next to the Church of Matriz de Na. Sr.a dos Remédios, whose churchyard, curiously enough, is paved with pebbles. The interior is quite rich in terms of contents and decoration. Visit it and enjoy the painting in the ceiling and the altars, the brownish wooden pulpit with fine golden elements, the columns painted so as to resemble marble, and even more details. The feast in homage to the patron saint takes place in the last Sunday of the month of August, but in the beginning of the summer you also have the popular Festas do Espírito Santo (Feasts of the Holy Spirit).

You reach the Largo do Rossio. With a population of only 76 inhabitants (the second smallest in the country), there are, nonetheless, some shops where you can buy something you might need, and there is even a very famous typical restaurant. Many of the houses in *Fajãzinha* have unusually wide façades, with one door and several windows. Sometimes, two semi-detached houses accentuate even more this feature.

Go around the café following to the right, then turn left behind it: you will reach the Largo do Outeiro, next to a small chapel rebuilt in 1974. Go down to the right and, next to the drinking through, then cover the Engenho street. It leads to a path that goes down to the traditional cheese dairy, but you must go up, turning to the Espinhaço street. Ahead, after you cover it, keep going up the trail to your right.

In the past, there were four ways of getting in and out of Fajāzinha: head south by going up the Ladeira do Portal (which you covered to go down); head north towards the Aldeia da Cuada, crossing the small river and covering narrow paths; head west towards the waterfalls, going up the Caminho da Cruzinha, now under the asphalt of the current main access to the parish; or, just as you are doing, go up using the Caminho das Cabeçadas and the Caminho da Ribeira da Alagoa, with its cobbled stairs.

This is an area full of citrus trees, apple guavas, banana trees, some vineyards and chestnut trees, but also yam, and, of course, some portions of land with grass or corn. There are many taps here, some of which with hoses to fill the tanks for the livestock. Close to the end of this ascent, you will find a door that opens to a block of flats in ruins whose construction dates back to 1951. You begin listening more distinctly the water from the *Ribeira Grande* making the rocks roll. In a recent episode, the stream of this small river, that runs abundantly all year, was so strong that it destroyed everything in its way, creating an insurmountable ravine that isolated Fajã Grande and its inhabitants.

When you leave the road, you see the water mill that used to grind corn and rye. Even though it is private, it is still operational thanks to an initiative by the Lajes town council, which hired Mrs Maria de Fátima to show and explain the visitors how the wheel mill works. Here, each component has its name and each tool has its utility.

Take the path towards Fajã Grande, crossing the Ribeira Grande bridge. You will find a sign indicating Poço da Alagoinha. Make that 800 metres detour so you can enjoy a surprising landscape. In order to do so, you have to go up the old footpath that enabled the Fajãzinha inhabitants the access to this place, always under a vegetation covering. That freshness is even more intensely felt when you see the water that runs in a stream at the final stretch of this ascent. You have finally reached the lagoon, a magnificent landscape where more than a dozen small cascades drop their incessant water from the top of an imposing and verdant rock into a still water lagoon. Take in the scenery calmly, slowly, resting your legs and your mind.

However, it is imperative to clarify that this place is incorrectly called *Poço da Alagoinha*. *Fajãzinha* inhabitants tell me that the *Poço da Alagoinha* actually exists, but is located approximately one kilometre south, where other cascades from the same rock converge in another area and provide water for the water mill you saw before. This lagoon you are now visiting is given the name *Poço Ribeira do Ferreiro* by the locals, and, about 40 years ago, it still dried every summer, growing grass that was reaped do feed the livestock. The steep footpath made that activity possible, and also allowed the inhabitants to collect wood for the ovens and have access to the places where yams were cultivated. Since then, a change in the hydrological system made possible the continuous water flow in this lagoon throughout the whole year.

Return to the road, cross the *Ribeira do Ferreiro* bridge, and turn right immediately after, entering a 660 metres long asphalt path at the end of which, next to an agricultural building, you will find one of the old trails that the population of *Fajã Grande* covered to have access to these higher lands, closer to the interior, and use them to their benefit. Today, some of them are still farmed, while others show signs of abandonment. This cobbled trail winds up and down, and is sometimes slippery in certain points. On both sides grow some rare species, such as the endemic plant *Chaerophyllum azoricum*. You will pass near an asphalt road, or even cross it, but do not deviate from this historical trail, keep walking

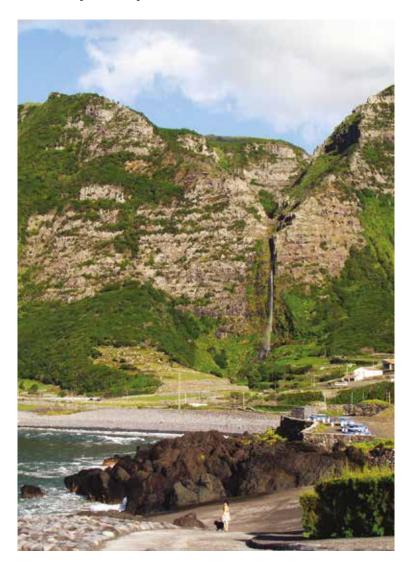
straight forward and you will soon see the first houses in Fajã Grande.

You will finally enter the *Padre José Luís de Fraga* street. Turn left and walk towards the centre of the village. Past a few houses and fountains, you will reach the Pe. José António Camões garden and the main cobbled artery that crosses an old part of Fajã Grande's dwellings, a street called *Senador André de Freitas*, a charitable politician who was born here in 1860.

Pass by the *Argonauta*, a resort that offers accommodation and other services. Past and above the church you will find a convenience store (a small market and a bar), a compulsory stopping point for foreign tourists in the summer, who enter the place to drink something refreshing or taste their *mistura* (mixture), a sweetened alcoholic beverage prepared by the owner. The neighbouring single-nave Church of São José with a little unusual painting on the main door is the place where the *Feast de N* o . *Sra. da Saúde* takes place on the 2^{nd} Sunday of September.

The path leads us to the port, perhaps the only one in the island's west coast, now used mostly by pleasure boats. This nature trail ends a few metres away from the crossroads where, if you turn right, the road will lead you to the Ponta da Fajã. However, keep going straight forward, past an area with grills where people eat, until you reach the bathing area. About 20 years ago, works were initiated next to this port so as to create a bathing area that offers a café with outdoor seating and a restaurant that, after adopting several other names, is now called *Papadiamandis*, the name of a Liberian cargo ship that sank on the 22nd of December 1965, at dawn, only 300 metres away from here. Just one of the many dozens of shipwrecks that took place near the Flores Island. This pleasant bathing area is decisive to explain why *Fajã Grande* has





become one of the most sought places in this municipality during the summer. During the rest of the year, it is still a fascinating place, uniquely located between the sea and the mountain. Take the opportunity to see the Poço do Bacalhau or relax while enjoying the magnificent sunset this place has to offer.

TRAILS OF THE AZORES



PR3 FLO

Miradouro das Lagoas - Poço do Bacalhau

Difficulty: Hard Extension: 7,3 km Time Average: 3:00h Category: Linear



On the 26th of May 2009 UNESCO classified the Flores island as a *Biosphere Reserve*. This walking trail helps you understand why. It is, without a doubt, the most diverse that the Flores island has to offer in terms of natural and human landscape. It begins in the *Central Plateau* of the island, one of the largest classified areas in the Azores, amid captivating lagoons and exuberant natural communities, and then goes down to the sea, culminating in a stupendous waterfall. This environmentally interesting region has several protected areas, among which is the island's Natural Park.



Start by going up the path towards the Lagoa Funda viewpoint, to the left, a lagoon also named Lagoa Negra, despite its intensely greenish water. It is the deepest lagoon in the Azores: approximately 130 metres deep. To your right is the *Lagoa Comprida*, whose water has a lighter tone, and, despite its steep slopes, is no more than 20 metres deep.

Sometimes, when referring to the beautiful lagoons in the Flores island, people use their names prior to the word caldera instead of lagoon. That obviously has to do with the fact that they were formed inside very distinctive craters in the landscape.

As you go around the Lagoa Comprida down a footpath, you will be able to marvel a huge waterfall that incessantly pours a large amount of cubic metres of water into the lagoon.

Around you and on the more protected slopes, lives a rich variety of plant species. The *Juniperus brevifolia* and *Calluna vulgaris* forest, typically seen in wet regions like this one, is filled with several endemic species. All the brambles are from the endemic species *Rubus hochstetterorum*, which has much larger leaves than the common bramble, and produces big and tasty berries. In a quick glimpse at the landscape, the yellow from the *Sphagnum sp.* contrasts with the light green of the *Festuca jubata* and the dark green of the cedars.

If it is not foggy you will be able to see in the distance the top of the *Morro Alto*, the highest point in the whole island: 914 metres of altitude. It was once used to install a telecommunications antenna and is now obviously used as a viewpoint.

The trail, with its ground flattened by the boots of walkers, is crossed by water in several stretches and is filled with the moss you typically see in these mountain areas, almost always wet due to the abundant rainfall and the influence of the fog.

This part of the island, located in a plateau, offers a landscape where the greens of the natural vegetation or of the clusters of cryptomerias coexist with the yellows of the lower and flatter areas, covered with the inevitable *Sphagnum sp.* and the *Juncus acutus*, which sometimes constitute real traps for heavier animals that try to cross them. The cows that quietly pasture in the uncultivated land are often the only element that adds different colours to the landscape. When the sun hides, the water in the lagoons gets much darker, creating a deep contrast with the whiteness of the waterfalls.

After covering the first kilometre, you will cross an asphalt road, and, on the opposite side, you will find the Caldeira Seca. Despite the name, at the bottom of it there is a marsh that is never completely dry, its free water always there the whole year, even if only in small quantities at times. This creates the conditions for the growth of a specific flora typically seen in this wet area, and certainly other forms of lacunal life impossible to discern at such a distance. However, it is easily noticeable the existence of *Vaccinium cylindraceum*, *Viburnum treleasei*, *Euphorbia stygiana*, *Laurus azorica* and *Ilex perado ssp. azorica*, among other species, covering the slopes. It is said that, in the past, pigs were taken down there, and, unable to escape, grew on their own until someone would go get them.

Cover 30 metres up the road and go down the "bagacina" slope on your left to take another shortcut that crosses the vegetation. Pay attention to the signs, for you can easily miss the entrance. It is a shortcut characterized by stretches of bare ground and small outcrops. Because it is often the lowest accessible part in this area, it is here that you will find the best itinerary: nonetheless, precisely because of its low altitude, the path is frequently



MAAR

They originate from phreatic or phreatomagmatic eruptions after the contact between the ascending magma and superficial waters or phreatic levels in the overlying rocks occurs. They don't usually form a volcanic cone — the craters are "fit" at the level of the surrounding region, often flattened. They tend to be circular and have less depth than length, with steep rocky slopes and a plane bottom, many times filled with the aforementioned lagoons.

muddy or completely wet, even during the summer. For that reason, be cautious when walking, for the ground can be very slippery, and stop whenever you want to enjoy the landscape.

500 metres later, you reach the Lagoa Branca, a lacunal system with a vast bog whose name might have been inspired by the more yellowish surrounding scenery. This is the fourth crater you have seen, and the oldest one as well. This lagoon is an important stopping point for migratory birds. Make a small detour towards the first bird-watching spot created in the Azores, more specifically in 2008. Here you will find information about the birds that have been spotted, some of which are quite rare; there are also other more common species that you might be able to see during this stop. The *Flores Central Plateu*, known as *Morro Alto*, was classified as Ramsar Site in 2008.

Resuming the trail, take a turn at the "bagacina" path that leads to the *Morro Alto*, cross the *Ribeira do Ferreiro* (here very small) and walk up the path for approximately one kilometre, until you reach an access to pastures on your left, a path you must follow in order to reach the cliff. In this climb, the slopes are covered with *Deschampsia foliosa* and other perennial herbs, and the landscape is increasingly insisting that we take a picture. Begin the descent towards the cliff through this secondary road used strictly for agricultural purposes, a road that gradually shows signs of deterioration and at each step seems more impassable to vehicles, which led to the creation of "alternative paths" in a fruitless attempt to avoid the deep ditches.

When you find another fork, turn right. You will reach a gate that asks us to be closed (*CLOSE ME*) and gives access to another pasture. To your left, the remains of what seems to be an antenna indicate the proximity of the cliff on the top of which it was once installed to benefit from this privileged location. Now inoperative, it remains here as a landmark.

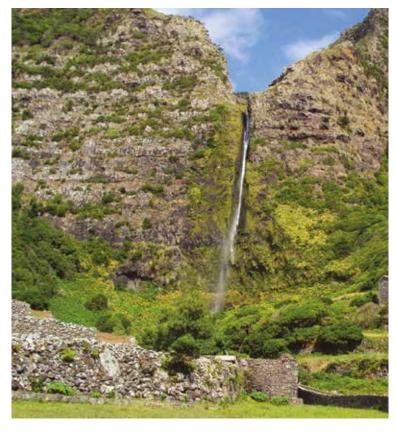
Despite the many grooves and the unevenness of the ground, keep moving forward the best way you can, using the wall to your right as a guide, for you may not be able to see any sign until you reach another narrow path at the beginning of the next pasture. However, do not take that path. Enter the pasture and keep walking straight forward towards the cliff, taking a slight turn to your left until you reach the stream. Here you will have the first view over Fajãzinha, a picturesque parish set at the bottom of this sort of idyllic valley. Go back and turn right this time, towards the Ribeira das Casas valley, on the opposite side, and keep walking until you get once again close to the cliff. The clear ground gives you an idea of the direction you must follow, but, in case you are no quite sure where you are heading, do not worry because you will soon see marks indicating where you are. In this valley, water runs down through the vegetation in a number of waterfalls, many of which invisible, but not inaudible. All this water from Ribeira das Casas originates from one single waterfall that is more than 100 metres high: the Poco do Bacalhau.

The Monchique islet has been part of the landscape for some time now, located one mile away from the coastline. There, that salience, the westernmost European point, marks the end of the Old Continent. However, it is important to bear in mind that, in geological terms, the island is located over

the American tectonic plate, not the Eurasian one.

Immediately after a first glimpse of the Fajã Grande bathing area, start going down through an old cobbled path. For centuries, this footpath was the best solution available for those whose lived in *Fajã Grande* and wanted to travel to Santa Cruz. Next to the lagoons, in order to make the journey shorter, the inhabitants they used to cross the Lagoa Branca over high layers of firewood placed by them in order to prevent falls in the water.

Due to the mud and debris that usually accumulate, going down the steps can require some caution. From the rocky faces grow rare endemic plants: *Euphrasia azorica, Scabiosa nitens, Ammi trifoliatum,* among others. Once you reach the last step, you find yourself on the edge of the cliff, were you can enjoy a spectacular view over *Fajã Grande* and *Fajãzinha*. The reticular configuration of the stone walls down there offers a very unique view. Go down this last pasture, always in line with the edge of the cliff, where the sound of the sea is now louder than that of the streams. You will soon find yourself next to a wooden gate that opens to the old stone staircase of the Rocha da





Fajã, providing an unexpected descent, surprisingly smooth considering the steepness of the rock.

The tree roots that create the outer hedge of the trail contribute to its structure. Somewhere in the descent, you will find a first spring, and, from then on, several others will emerge from the reddish paleosol and the lava that buried it. Further down, a considerable number of *Picconia azorica* comes into view. The steps widen and we enter a tunnel formed by the *Pittosporum undulatum*. You end the descent by entering a shortcut covered with grass, with the *stream of Paus Brancos* — a very appropriate name — on your left, and immediately after, on your right. A fountain with drinking water indicates that an asphalt road is about to appear.

When looking back at the rock left behind, you might find it hard to believe that the path you have just covered, camouflaged by the vegetation, actually exists. Walk 400 metres more on the asphalt road towards the sea and you reach the Ribeira das Casas bridge. Go up the pleasant 280 metres long cobbled pavement with a beautiful hedge that stretches along the left side of the stream, until you reach the *Poço do Bacalhau*. Along the way, you will find the ruins of four mills, plus two more on the opposite bank. At least some of them date back to the late 19th century. You can also have an idea of how the water channel system worked, since it was partially reconstructed, by seeing the waterfalls that used to move the now disappeared wooden wheels of each mill. If the wind happens to be blowing stronger from a specific quadrant, the walk towards the *Poço do Bacalhau* is made under a soft spray cast from the majestic waterfall. This nice small lagoon, which has never heard the sound of silence, hides a freshwater eel named Anguilla anguilla in its submerged stones. But do not feel discouraged nor fear the possibility of any danger: take your boots off and refresh yourself by cooling your feet, or more than just your feet, in this water that slides down the mountain hiccupping in each rock it meets on its way.

TRAILS OF THE AZORES



PRC4 FLO

Fajã de Lopo Vaz

Difficulty: Medium Extension: 3,5 km Time Average: 2:00h Category: Circular



PRC4 FLO Fajã de Lopo Vaz

The Fajã do Lopo Vaz is in front of us, set in the landscape that we see, for a considerable stretch of the descent towards it. For that reason, try to make this walking trail in the morning with your back facing the sun. The distance covered will be approximately two kilometres long until you reach the western extreme of the fajã, and two kilometres more to return. This is the only access to the fajã, so you will have go back up using the same path. This fajã is located in the *Protected Area for the Management of Habitats or Species from the South and Southwest Coast.*

By the regional road outside Vila das Lajes you start to see some signs indicating the direction to follow in order to reach the starting point of this hiking trail, approximately 1,8 kilometres away and covered through B-roads. So, head towards the Parque das Merendas and the cliffs viewpoint by car. This is the exact spot where you will begin the descent that will lead you to the Fajã de Lopo Vaz.

Before you begin, head up towards the cross for a first view of the cliff on the island's southern coast, covered with vegetation that nonetheless is unable to completely hide the trail we will cover. The Fajā do Lopo Vaz is hidden by the cliff, but from here you can see another more distant fajā, originated by a landslide that occurred on the 22nd of May 1980. This cliff named Rocha Alta, which is now approximately 440 metres high, is only surpassed in height by the western cliff of the Caldeirão, which is 710 metres high and is located in the Corvo island. The tremendous earth-moving that resulted in the formation of this detrital fajā took everybody by surprise, having caused a tidal wave that produced damages in the neighbouring port of Vila das Lajes, where the rise of the water level temporarily submerged some stranded boats and the port itself. Nowadays it can only be reached via Costa do Lajedo.

Around 1508-1510, Lopo Vaz moved from the Terceira island to the Flores island as one of its first settlers. Gaspar Frutuoso, a chronicler from the 16th century, writes in his Saudades da Terra: "... next to the rock lays a fajã of Lopo Vaz, for it is his, with no more than twenty bushels of land, that produces wheat and woad ...", and, later in the book: "... until you reach a fajã, called Lopo Vaz, with one hundred and eighty bushels of ground and at sea level... there are limpets and crabs, and on the shore there is a rocky cliff, high as the distance covered by a crossbow arrow, where Lopo Vaz opened a path through which the oxen go down". I don't think you will see wheat or woad today, perhaps limpets or crabs, but you will most certainly contemplate other admirable things.

The trail alternates between stretches of dirt with wooden trunks as a protection, cobbled stretches, and, occasionally, stone steps so that the descent of the slope is made easier. Immediately after you begin going down, you will find a niche in the cliff with a small statue of the Virgin Mary and a cross. In other islands, this could be evocative of some tragic accident that had taken place in that spot, but here no one was able to explain to me the reason behind it. However, this image (as well as four more placed further down the path) is maintained in its original place, perhaps to protect the visitors.

It is a large footpath, which can easily be covered by large four-legged animals, like cows, donkeys or horses, the last of which I had the opportunity to see in this fajã. The descent is made through *Picconia azorica*, *Pittosporum undulatum*, *Arundo donax*, *Erica azorica and Cryptomeria japonica*. A few minutes after you have initiated the descent: you reach a staircase with sharp curves that is said to have been built by Lopo Vaz himself in the first decade of the 16th century.

This is the point where you get the first glimpse of the fajã. This one does not penetrate the sea like many others; it is set at the top of a plateau about 300 metres above the sea level, with an inaccessible slope facing south, which resulted from sea erosion. Behind it is one of the highest cliffs in the island. In this small portion of fertile soil, the reticular configuration of the stone walls divides small

PRC4 FLO Fajã de Lopo Vaz

agricultural plots where orchards and pastures were created.

At the beginning, next to the first of a total of no more than half a dozen houses that exist in the fajã, is a dark volcanic sand beach, the only safe access to the sea. Once you arrive here, you must continue down the shortcut that will lead you from that house to the next one.

The path crosses a wet area: walk over the strategically placed rocks to be able to continue. This water comes from the only source in the whole fajã, a spring that exists next to the cliff, more than 350 metres above the ground. Since it is drinking water, it ensures the survival of the livestock and the specific fruit that grows here. It also makes possible the cultivation of taro (*Colocasia esculenta*), which, despite being a subspontaneous species, when cultivated, its thick underground rhizomes can be harvested for human consumption, namely to be used as a garnish in typical pork-based dishes from the Azorean cuisine, such as torresmo or linguiça. Its big leaves often share the same space with the invasive species known in this island as cana-roca (*Hedychium gardnerianum*), commonly designated Kahili ginger.

There is no electricity in the fajā, but there are water taps in abundance. Further ahead, if you get the feeling that the shortcut somewhat disappeared, do not worry: enter the pasture and keep walking through the open gateways in the stone walls. Further ahead you will find yourself back on the shortcut. On the cliff to your right, flows the water from the aforementioned spring, creating a small rivulet that you have to cross.

There is no way out of the fajã, so you will have to go back through the same path you covered. In case you wish to further explore the fajã, head towards a solitary Azores juniper before reaching the stream and make your way back closer to the sea, even though this option requires overcoming some obstacles. The stone walls were knocked down in certain spots for the cows to go through. Use those passages in order to continue your hike.

Before starting the ascent, on your way back to the first house in the fajã, you can explore the beach. Although it seems modest in size, I believe it is the largest sand beach in the whole island — a very rough sand, though, gravel-like, with countless rocks laid down by the sea and, in certain points, threatened by the invasion of reeds. Also, this beach is used for bathing, as confirmed by the existence of improvised showers next to one of the walls.

Now, in order to leave the fajã, the same 1200 metres you have covered since you have left the viewpoint await you — a distance that can now seem longer. Have a nice climb.



A TROPICAL MICROCLIMATE

The Fajã de Lopo Vaz is a south-facing low-altitude terrain that benefits from and ideal sun exposure and is protected from the harsh wind that blows persistently from the west. It is a great spot for acclimatization and cultivation of some species with more tropical characteristics that find here a sanctuary where they grow and reproduce easily. During the descent, but mostly at the fajã, you will be able to see fruit species like fig trees; red cattley guava — more common in this island than the yellow — fully grown during the month of September; redcurrant bushes that are loaded with their bitter berries in August; banana tree orchards protected from the wind, with their big bunches; and also pineapples in one of the houses small farm.

TRAILS OF THE AZORES



GR1 FLO

Great Route of Flores

Difficulty: Hard Extension: 47 km Time Average: 18:00h Category: Linear





GR1 FLO Great Route of Flores

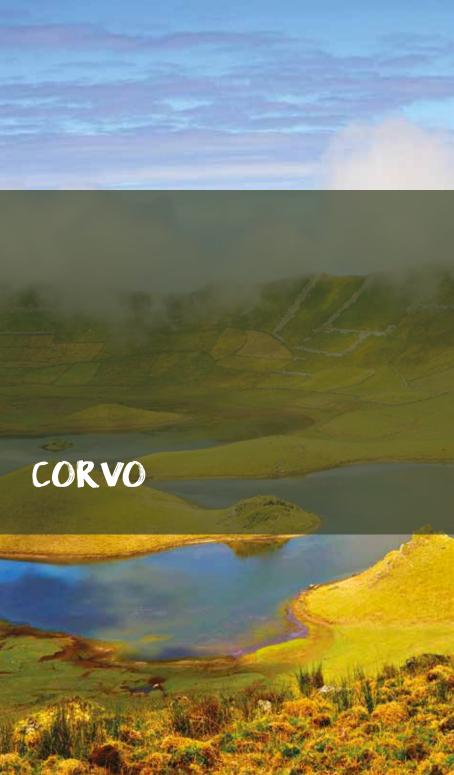


The Great Route of Flores covers a considerable part of the island's coast-line, connecting Santa Cruz das Flores to the parish of Lajedo — located at the southwest coast of the island — through a linear trail characterised by its high difficulty level. Some stretches are not advisable for people who suffer from vertigo, especially the *Rocha do Risco* slope.

This footpath offers very rich volcanic landscapes, complemented by the existence of small isolated villages and a diverse vegetation with a wide variety of endemic species, namely in the northeastern coast and the western coast cliffs. Whenever possible, you can enjoy the several bathing areas that exist along the course, and, when crossing the urban and rural centres, you can also take the opportunity to purchase any supplies you might need to continue the walk as well as take a rest to recover.

This hike is divided in two stages of approximately 21 and 26 km each. The first stage — between Santa Cruz and Ponta Delgada — is characterised by wide and deep valleys crossed by numerous streams that led to the construction of a Hydroelectric Power Station at the initial stretch. In addition, the stage covers the northeastern coast, characterised by a steep relief and a vast coastal outline with many islets, crags, headlands and inlets, which form an important nidification area for several species of seabirds. As for the second stage — between Ponta Delgada and Lajedo — the low and linearized coastal cliff that stretches from Ponta Delgada to Ponta do Albernaz is replaced by one of the most beautiful seaside landscapes in the Azores, where the lavic and detritic fajãs — such as Fajã Grande and Fajãzinha — are separated at the island's Central Plateau by a large fossil cliff about 300 metres high, from which countless streams flow, creating impressive waterfalls in the slope, the most remarkable of which is the Poço da Alagoinha, consisting of a lagoon at the bottom of the cliff. The small villages like Mosteiros — the least populated parish in the whole country — add a special charm to the surrounding landscape.

Considering the extremely uneven altimetry that characterises the path, you should take into account your physical condition, the degree of your interest, and how much effort you are willing to put before covering it. Moreover, the trail crosses several water streams, so you must also consider the rise of the water level in the days subsequent to high precipitation.



TRAILS OF THE AZORES



PR1 COR Cara do Índio

100 40

Difficulty: Medium Extension: 4,5 km Time Average: 2:30h Category: Linear



2

Ask someone to drop you off at the Cova Vermelha, the starting point of this hike. To your right, up high, is the top of the south-facing slope of the *Caldeirão*, the large volcano that created this island, and, at a shorter distance, is the Coroinha, name given to this crescent-shaped ridge that circumscribes the first of the island's two deepest valleys, which you will cross.

When starting the hike, do not forget to close the gate behind you, and then go down the footpath that crosses the pastures in front of you. The contrast between the whitish shade of the stone walls and the vegetation — dotted here and there with rush —, creates interesting drawings. Those walls certainly served one of the three purposes people ascribe them in the Azores: divide the lands, keep the livestock and protect the crops from the wind, or store the surplus stones in the ground. One of the particularly striking features of the landscape is the unexpected circular shape of one of those walls in the middle of the slope.

What at first sight appears to be a number of isolated mounds of stones is, in fact, a sum of peculiar water wells. These agricultural structures, commonly seen in this island's pastures — and exclusively found here —, consist of small holes with a dirt bottom, around which are unevenly placed some considerably large rocks. They are efficient to retain and store the rainwater that flows in their direction through grooves fur-



rowed in the ground. Other rocks, or stone slabs, are used to partially cover these reservoirs and protect them from the sun, keeping the water more fresh and drinkable for the livestock.

After an initial 150 metres descent, the footpath curves to the left and stretches for 150 metres more along a flatter surface until you reach a fork. Turn right until you enter a pasture. Keep walking in line with the wall on your right, and do not be surprised if the grass is too high. Jump into the next pasture and keep going in the same direction, past a small

elevation with outcrops on your left. Continue until you reach a cliff where all the northern coast of the Flores island can be seen, and where there is a sign that reads *Cara do Índio* (Indian's Face). Once you are there, look down very closely, towards the sea, and you might be able to distinguish this curious form naturally sculpted in the escarpment, a form that resembles an Indian's face in profile. Keep going down towards the village, always walking next to the cliff.

The Canto do Pão de Açúcar (a more pronounced outline at the bottom of the cliff) displays a small valley where the wild goats wander on the bare rocks close to the sea. This is the only island in the Azores where there are no wild rabbits. But, on the other hand, it is estimated that several dozens of wild goats inhabit the coastal cliffs around virtually the whole island. They occasionally climb the cliffs and head to the pastures, after which they immediately return to take refuge in these inhospitable places.

You then enter a pasture where a natural stone arch defies gravity. The monotony of the biodiversity of the pastures contrasts with that of the ravines, where *Picconia azorica*, *Solidago sempervirens*, *Juniperus brevifolia* and many other species grow.

A few steps ahead, the village *Vila do Corvo* reveals itself. The signs along the trail will indicate that you must cross some pastures, turning left without going too far down, until you reach the old footpath that gave access to these higher fields of the Morro da Ponte, which you will now have do go down. This place is one of the main shelters for the Azores juniper (*Juniperus brevifolia*), a species that for centuries was continuously cut down due to the good quality of its wood. In addition to being used for making agricultural implements and serving several other purposes, it later became a raw material for handicrafts.

You will pass next to a rock worn away by human intervention to serve as a temporary shelter from unexpected heavy rainfalls, after which you will finally reach the road, next to a water collection system. Go up 50 metres until you reach the Sítio do Portão viewpoint in order to once again see and enjoy *Vila do Corvo*.



HANDICRAFTS AND GASTRONOMY

Among the Corvo Island handicrafts are the caps and berets made of typical wool, traditionally in dark blue with a white stripe; the woven pieces, which include a number of woollen items — a remembrance of the virtually disappeared wool weaving tradition; as well as the embroidery and the lace. The Corvo's typical locks and keys, entirely made of wood, are equally noteworthy. The Couves da Barça, the Tortas de Erva do Calhau, the Molho de Figado and the Couves Fritas are examples of the traditional gastronomy, but it will not be easy for you to find a place where they are served. The handmade cheese is also something you do not want to miss.

In the past, due to the coastal belt characterised by extremely high cliffs around virtually the whole island, its inhabitants, surrounded in the winter by an often-enraged sea, were deprived of any contact with the outside world for weeks. Despite the ultraperipheral nature shared by all the islands in the Azores, it is still here that the notion of *insularity* is most felt. The Corvo village is the only village in the whole island. Developed on a small plane platform that is in sharp contrast with the rest of the island, and which extends it southward, the village had more than 850 residents in the 19th century against the current 400 inhabitants, approximately. In this cluster of two storey houses — the ground floors of which were used to breed pigs —, all nestled against the slope, one above the other, separated only by narrow winding streets called "canadas" or "canadinhas", only few of them maintain the features of the typical Corvo house. The imported tile replaced the regional tile, the bare stone walls are now plastered and whitewashed, and other architectural details disappear each time one of those houses is reconstructed or expanded. Even so, the oldest part of the village maintains the overall appearance that characterised it until 50 years ago — an appearance now somewhat overshadowed by a number of new edifices that started to be built westward.

Cover approximately 30 metres down the road and enter the Caminho da Fonte Velha (or Caminho da Central), the path that used to link the village to the farms and the uplands in the highest region of the island, where some orchards were cultivated and some animals were bred, and where the barns used in the past to store the forages and the farm implements can be seen. A few metres down, you reach the road and immediately after you will find yourself back on the old path, next to a sign indicating where this hike ends: "Praia a 2 km". You walk past some small abandoned vegetable gardens, enter a concrete stretch and arrive at a place with three different options: go down the Ladeira do Maranhão to your right, a cobbled slope with a central strip paved with larger stones specifically placed to alleviate the effort of those who climb and go down. You will now wind along the narrow streets of the village. Do not forget to visit the Environmental and Cultural Interpretation Centre of Corvo, which is also the Azores Geopark Island Delegation. In addition to its museological component, here you will find an exhibition space where, using a scale model of the island, you will be given an instructive explanation about the most interesting and important things to know about the flora, fauna and humanised landscape of this island classified as Biosphere Reserve. Go down to the Largo do Outeiro, the square that was the social/religious centre of the village, with its Casa do Povo and its Casa do Espírito Santo, established in 1871 and displaying its unique crown on the façade and a belfry on the roof. Turn right and then left, covering the Rua da Matriz. You will reach the Church of Nossa Senhora dos Milagres. where people worship the saint looking at a valuable Flemish sculpture of her image that dates back to the beginning of the 16th century. It was common practice for the elderly to gather next to the 1795 church, which replaced the former chapel, to talk and socialize.

Resume your hike and feel free to make a couple of small detours to take in what surrounds you. You will cross the Largo das Forças Armadas and reach

the roundabout next to the end of the airfield runway — officially open on the 28th of September 1983 — and close to the descent that leads to the Porto da Casa, built in the 1960's and currently the only one in the island that is used for commercial and recreational purposes. Here you will find one of the three café/restaurants in the whole island. Even though the island's typical dishes are written in the menu, it is highly unlikely that you will have the opportunity to taste the. However, you might be able to eat good fish, which is abundant in the surrounding waters: forkbeard, Mediterranean parrotfish, black grouper, blackbelly rosefish, snowy grouper, red sea bream, rockfish, horse mackerel, or grouper.

Walk westward, along the south side of the airfield runway. You will see another inlet, where the Porto do Boqueirão is located — a port where boats used to moor —, and then reach the *Casa do Bote*, where the tourist office is installed, and where you will be given the opportunity to see the typical Corvo whaler, similar to the other Azorean boats built for the same purpose — for here, like in other islands, whale fishing was common —, as well as a suggestive photo exhibition from Prince Albert of Monaco.

Take the Caminho dos Moinhos, enjoying the typical windmills from the Corvo island that add a new life to the landscape. In the past, there were a total of seven in the whole island. Today, only three remain, and were classified as Public Interest Buildings. One of them maintains its black stone appear-



ance, while the other two, a bit more distant, where plastered and white-washed. They are different from any other windmill in the whole archipelago, resembling those that the Moors left in the mainland. Inside each one of them, an ingenious mechanism made the cupola turn so that the cloth sails would obey the wind. When the airfield was built, mills disappeared, as well as many of the village's arable parcels of land, where cereals were cultivated for these mills, the handmills and the *Caldeirão* mill. Past the last of these mills, you can enjoy the old breakwater of the called Porto Novo, the port that served the island in the past and where the whales whose fat was transformed into oil for the oil lamps were towed.

Past the last house, the path curves to the left, towards the sea, crossing the beach lands. Corn and plenty of pumpkins replaced the wheat and rye that used to grow in these agricultural plots. When you reach the sea, turn right and walk along the coastal line where the black rock blends with the typical seaside vegetation, particularly the *Crithmum maritimum*, *Solidago sempervirens*, and plenty of *Azorina vidalii*, an endemic species very commonly seen in this island, even on the roofs of the houses. The hike ends at the beach, also known as Portinho da Areia, at the western extreme of the airfield runway, the only sand beach in the island and its main bathing area.

Once the hike ends, take the opportunity to further explore the Corvo village, the most isolated one in the country. If you visit the *Casa de Artesanato do Corvo* (Corvo Handicrafts House), you will be given the opportunity to know the history of the typical pompom caps that protected the heads of those who embarked on the American whalers towards a harsh destiny characterised by homesickness. Here, in addition to the typical woollen caps and berets, traditionally in dark blue with a white stripe, you can still find embroidery and the lace pieces, as well as miniatures of the Corvo's typical *fechaduras*, locks and keys entirely made of Azores juniper wood — probably the island's most well-known handicrafts.



TRAILS OF THE AZORES



PRC2 COR

Caldeirão

Difficulty: Medium Extension: 4,8 km Time Average: 2:30h Category: Circular















PRC2 COR Caldeirão

Some say that Corvo is but an enormous volcano (Monte Gordo) whose top subsided forming a considerably large caldera named *Caldeirão*. Do not be fooled into believing this limited view, for this island has much more to offer, even in terms of natural landscapes. However, there is no denying that this *Caldeirão*, often shaded by the passing clouds or by the hovering fog installed, has a special charm and is the pride and joy of all of those who were born and live in Corvo.

This island, formed in the ocean approximately 750 000 years ago, was initially called *Insula Corvi Marini*, which roughly translated would mean something like "Black Cormorant Island", and later named Corvo Island. A likely explanation for the origin of the name resides in the fact that the first sailors to reach the island might have mistaken some bird flying over the region for black cormorants (*Phalacrocorax carbo*), a species rarely seen here.

Except for the place where the village - Vila do Corvo - was established, the whole island is a circular belt of colossal cliffs. The erosive agents (wind, rain, and sea) slowly broke the rocks and wore away the not very resistant scoriae from the external flanks, advancing intensely in the western flank



towards the inside of the *Caldeirão*. About 6 kilometres of asphalt road connect the village to the viewpoint, where the hike begins. A car will drive you up until you reach the 560 metres of altitude on the eastern region of this crater's ridge, with a perimeter of about 6,5 kilometres. In the south region, the ridge reaches the island's maximum altitude: 718 metres.

In case the visibility is poor, you might find it difficult to know exactly what directions to follow, despite de abundance of signs that serve as

PRC2 COR Caldeirão

guidelines for the nature trail. However, even with a foggy road, the lowest part of the caldera might be sufficiently clear so as to justify the hike and enable a comfortable walk, characterised by the feeling that we are enclosed in a huge bowl.

The descent towards the two lagoons that are at the bottom of the *Caldeirão* is made along a zigzagging shortcut, sometimes a little bit damaged, muddy and slippery due to the water that runs through it, and that, even in the summer, forms small rivulets in some places. In the past, this path was more carefully maintained in order to serve the many people who took their animals to the inside of the *Caldeirão* and back out — not only cows, but also sheep and pigs.

Inside the Caldeirão you will find many permanent pastures, but also important natural habitats like peat bogs, Macaronesian heaths, and lagoons. Down here, the wind's whistle is less loud, allowing the flight of the Hipparchia azorina, a brownish black-spotted endemic butterfly that can be seen flying in the summer along with the birds. However, it is in the autumn that we witness an influx of bird watchers trying to take pictures of the migratory birds that stop here to recuperate — by resting and feeding or even nest after the tremendously hard flights over the Atlantic Ocean. It is possible to hear and observe the Gallinago gallinago, frequently seen here, the Sterna hirundo or the Anas platyrhynchos, as well as many other rare species. Among these, and because of their historical relevance in this island, we highlight the *Puffinus puffinus*, which were hunted for their meat, feathers and fat, the latter being used in lamps oil lamps to light up people's homes. Nowadays, this species from the North Atlantic whose number amounts only to approximately 200 couples, nests exclusively in the Flores and Corvo islands, their south limit on the planet. The Caldeirão was classified as Ramsar Site in 2008 and Protected Area for the Management of Habitats or Species from the Corvo Coast and Caldeirão.



CALDEIRÃO

It is considered a true paradise for bird watchers, who come to the island in greater numbers during the months of October and November. When summer ends, it is possible to see more closely the different migratory birds that, after flying over the Atlantic Ocean, insist on stopping over at this oasis, where they recuperate and can feed and/or procreate.

Interesting and unique in the Azores was also the mill between the two lagoons. When visiting what remains of it, you will learn its curious functioning, whose motive power was the water that, because of gravity and due to a dam that was built, ran slowly from the larger lagoon to the smaller one. However, grinding here was a last resort solution, because of the effort required to carry the cereals to this location and of the time it took to grind each sack.

PRC2 COR Caldeirão

At the bottom, walk around the lagoons following whatever direction you wish, for you will end up returning to the same spot in order to be able to leave the *Caldeirão*. It is, however, recommended that you walk anticlockwise, always with the lagoons at your left.

This extinct volcano, with extremely steep slopes, has two lagoons whose water originates from rainfalls or from the streams that flow down the slopes, which in turn are "fed" by *Sphagnum sp.* carpets that cover the higher areas. These water mirrors reflect all the colours and the topographic relief of this crater dotted with small late cones eruptions. All the features change between the summer and the winter, as the rain fills the lagoons. The stone walls, called *abrigadas* and mostly L-shaped, are used to protect the sheep from the wind blown from any quadrant. On the western slope, other walls geometrically divide the lands, parts of which are private properties, while the rest is uncultivated municipal land — all clear signs that these lands were always subject to considerable human activity.

Here and on the other uncultivated lands in the island, cattle's breeding was omnipresent, even before the settlement began. The herding activity was the perfect paradigm of the communitarian life that the inhabitants of Corvo had. There was one specific day of the year — the Monday immediately after the Whit Sunday — when the island's sheep were sheared. It was called the dia do fio ("thread day") or dia da lã ("wool day"). During the 1960's, there was an attempt to establish a new land exploration system. in the island, to which the people strongly opposed, and which dictated the early end of sheep farming, wool production, and related traditional activities (economical and social) that were part of the identity of the island's culture. Today, sheep are virtually inexistent. Pigs were also bred here — small caves were dug inside the Caldeirão to serve as their shelter. Even potatoes were cultivated inside the caldera. But those things no longer exist. Only a few dozen multicoloured cows that graze in the interior, occasionally breaking the silence with their moos accompanied by the birds singing.

Around the lagoons, it is not the boots of the walkers that draw the trail; it is the hooves of the cows, which often make the ground muddy and uneven. Keep walking calmly. The lagoons have fish, some about 30 centimetres long, even though they are not easily perceivable. Also at the bottom of these waters, a rare water fern — an endemic Azorean species called *Isoetes azorica* — creates vast and thick carpets, more than 2 metres below the surface. Equally rare is the *Euphorbia stygiana*, an arborescent species, also endemic, which grows in the small islet you will see in the middle of the second lagoon.

When you walk around the second lagoon, you will find a small thicket of cryptomeria, the only one in the whole caldera, as well as some marshy areas, so you must be particularly cautious and pay close attention to where you step. Continue until you find the trail you covered in order to get inside the *Caldeirão* and take it, covering it in the opposite direction until you reach the point where you started.

Endemic Species of Vascular Plants

Scientific name	Nome Comum	Common Name	Protected	Colonization
	Nome comun	Common varie		Status
Agrostis azorica	<u> </u>	•	Yes	X END
Agrostis congestiflora	-	•	- Vee	END X END
Ammi trifoliatum	- A	- 	Yes	
Angelica lignescens	Angelica	Azorean Angelica	Yes	
Arceuthobium azoricum	-	Azorean dwarf mistletoe	Yes	X END END
Asplenium azoricum	- Vidalia	Azores Bellflower	Yes Yes	
Azorina vidalii		Azores Belljiower	Yes	X END
Bellis azorica Cardamine caldeirarum	Margaridas -	Azorean bittercress	-	END
Carex hochstteteriana	-	Azorean bittercress		END
Carex peregrina	<u> </u>	<u>.</u>		MAC
Carex peregrina Carex viridula	<u> </u>	Yellow sedge		MAC
Carex vulcani	<u> </u>	renow seage		END
Chaerophyllum azoricum	<u> </u>		Yes	X END
Corema album	Camarinha	Portuguese crowberry	Yes	X END
Daboecia azorica	Queiró	Tortuguese crowberry	Yes	X END
Daucus carota	Salsa-burra	Wild carrot	-	END
Deschampsia foliosa	Feno	-		END
Dryopteris azorica	-			END
Dryopteris crispifolia	-	-	-	END
Elaphoglossum semicylindricum	Língua-de-vaca		-	MAC
Erica azorica	Urze, Vassoura	Azorean heather	Yes	END
Euphorbia azorica	Erva-leiteira	Azorean spurge	-	END
Euphorbia stygiana	Trovisco-macho	-	Yes	X END
Euphrasia azorica	-		Yes	X END
Euphrasia grandiflora	-	-	Yes	X END
Festuca jubata	Bracel-do-mato	Fescue	-	MAC
Festuca petraea	Bracel-da-rocha	Azorean fescue	-	END
Frangula azorica	Sanguinho	Azorean Buckthorn	Yes	X END
Gaudinia coarctata	-	-	-	END
Hedera azorica	Hera	Azorean Ivy	-	END
Holcus rigidus	-	-	-	END
Huperzia dentata	-	-	-	MAC
Hypericum foliosum	Malfurada, Milfurada	Hypericum	-	END
Ilex perado subsp. azorica	Azevinho	Azorean holly	Yes	END
Isoetes azorica	-	-	-	END
Juniperus brevifolia	Cedro do mato , zimbro	Azorean juniper	Yes	X END
Lactuca watsoniana	Alfacinha	-	Yes	X END
Laurus azorica	Louro da terra, louro de cheiro	Azorean laurel	Yes	X END
Leontodon filii	Alfacinha, Patalugo-maior	-	Yes	X END
Leontodon rigens	Alfacinha, Patalugo-menor	Hawkbit	-	END
Lotus azoricus		-	Yes	X END
Luzula purpureosplendens	Saragasso	Wood rush sp	-	END
Lysimachia azorica	-	Yellow pimpernel	-	END
Myosotis azorica	Não-me-esqueças	Azorean mouse ear	Yes	x END
Myosotis maritima	Não-me-esqueças	Forget-me-not	Yes Yes	X END END
Ophioglossum azoricum	Língua-de-cobra	Small adder's tongue		
Pericallis malvifolia Picconia azorica	Cabaceira Pau-branco	Azorean pericallis	Yes Yes	X END
		Azorean picconia	Yes	
Plantanthera micrantha	Orquídea selvagem	Azores butterfly orchid		**
Platanthera azorica	- Polipódio	Azorean small orchid Azorean polypody	Yes -	X END END
Polypodium azoricum			Yes	
Prunus azorica Rubus hochstetterorum	Ginjeira, Ginja-do-mato Silva-mansa	Azorean cherry Azorean blackberry	Yes	X END
Rumex azoricus	Labaça-das-ilhas	nzoreun biuckberry	Yes	X END
Rumex bucephalophorus	Lauaça-UdS-IIIIdS	Red dock	162	MAC
Sanicula azorica	Erva-do-capitão	7.EU UULK	Yes	X END
Sanicula azorica Scabiosa nitens	Ei va-uu-Capitau	-	Yes	END
Silene uniflora	Bremim, Abremim	Sea campion	Yes	X END
Smilax azorica		Azorean greenbrier	-	END
Spergularia azorica	-	-	Yes	END
Tolpis azorica	<u> </u>	Tolpis sp	Yes	END
Tolpis succulenta	-	-	-	MAC
Vaccinium cylindraceum	Uva-da-serra, Uva do mato, Romania	Azorean blueberry	Yes	X END
Viburnum treleasei	Folhado	Lauristinus	Yes	X END

Invasive species of vascular plants

Scientific name	Nome Comum	Common Name	Colonization status
Acacia melanoxylon	Acácia	Australian blackwood	i
Adiantum hispidulum	Feto-pata-de-galinha	Rough maidenhair fern	i
Agave americana	Piteira, Pita	Century plant, American aloe	i
Aptenia cordifolia	Rosinha-de-sol	Baby sun rose	i
Araucaria heterophylla	Araucária	Norfolk island pine	i
Arundo donax	Cana	Giant reed	i
Banksia integrifolia	Bânccia, Cigarilha	Coast Banksia	i
Buxus sempervirens	Buxo	Boxwood, common box	i
Canna indica	Conteira	Canna lilly	i
Carpobrotus edulis	Bálsamo, Chorões	Ice plant, Hottentot fig	i
Chamaecyparis lawsoniana	Cedro-fino	Lawson's cypress	i
Chelidonium majus	Erva-das-verrugas	Greater celandine	i
Chrysanthemum segetum	Malmeguer bravo	Corn marigold	i
Colocasia esculenta	Inhame	Taro	i
Corynocarpus laevigatus	Loureiro-da-Nova-Zelândia	Karaka	i
Cryptomeria japonica	Critptoméria	Cryptomeria	i
Cyrtomium falcatum	Feto-azevinho	Japanese Holly-fern	i
Doodia caudata	-	Small rasp fern	i
Eucalyptus globulus	Eucalipto	Tasmanian bluegum	i
Fagus sylvatica	Faia europeia	European beech	i
Ficus carica	Figueira	Common fig	i
Gunnera tinctoria	Gigante	Chilean rhubarb, dinosaur food	i
Hedychium gardnerarum	Roca-da-velha, Conteira	Yellow-ginger-lilly	i
Hydrangea macrophylla	Hortênsia	Hydrangea	i
Ipomoea indica	Glória-da-manhã	Blue morning glory	i
Lantana camara	Lantana, Cambará	Lantana	i
Lavatera arborea	Malvão	Tree mallow	i
Malus domestica	Macieira	Apple tree	i
Metrosideros excelsa	Árvore-de-fogo	Metrosideros	i
Opuntia ficus indica	-	Barbary fig, prickly pear	i
Phormium tenax	Espadana	New Zealand flax	i
Physalis peruviana	Tomate-de-capucho	Cape gooseberry, goldenberry	i
Pinus pinaster	Pinheiro-bravo	Cluster pine	i
Pittosporum undulatum	Incenso, Faia	Australian cheesewood	i
Platanus acerifolia	Plátano	London plane	i
Polygonum capitatum	Erva-do-capitão	Pinkhead smartweed	i
Populus nigra	Choupo	Black poplar	i
Psidium littorale	Araçaleiro	Strawberry guava	i
Quercus sp	Carvalho	Oak	i
Rubus ulmifolius	Silva	Thornless blackberry	i
Sequoias sempervirens	Seguoia	Coast redwood	i
Solanum mauritianum	Fona-de-porca	Solanum	i
Spartina versicolor	-	Cord grass	d
Tetragonia tetragonioides	Espinafre da Nova Zelândia	New Zealand spinach	i
Trandescantia fluminensis	Erva-galinha	River spiderwort	i
		p	

Native species of vascular plants

Scientific name	Nome comum	Common Name	Protected	Colonization status
Asplenium heminiotis	Feto de 3 bicos	-	-	n
Calluna vulgaris	Rapa, Queiró	Common heather	-	n
Centaurium sciloides	-	Perennial centaury	-	n
Crithmum maritimum	Perrexil	Rock samphire	-	n
Culcita macrocarpa	Feto-cabelinho	Tree fern	Yes	n
Diplazium caudatum	-	-	-	n
Equisetum telmateia	Cavalinha	Horsetail	-	n
Morella faya	Faia-da-terra	Candleberry tree	-	n
Myrsine africana	Tamujo	Cape myrtle	-	n
Osmunda regalis	Feto-real	Royal fern	-	n
Parentucellia viscosa	Erva-peganhenta	Yellow bartsia	-	n
Potentilla erecta	Tomentilha	Tormentil, erect cinquefoil	-	n
Pteris incompleta	-	=	-	n
Ranunculus cortusifolius	Bafo-de-boi	Buttercup sp	-	n
Solidago sempervirens	Cubres	Seaside goldenrod	-	n
Trichomanes speciosum	-	Killarney Fern	-	n
Woodwardia radicans	Feto-do-botão	Rooting chainfern	Yes	n

Azores endemic species for fauna

	Terrestrial Art	hropods			
Scientific name	Nome Comum	Common Name	Protected	Р	Status
Argyresthia atlanticella	Traça-da-urze	-	-	-	END
Pisaura acoreensis	Aranha-creche	Nursery-web spider	-	-	END
Pieris brassicae azorensis	Borboleta-da-couve-dos-Açores	Azorean large white	-	-	END
Savigniorrhipis acoreensis	Aranha-do-cedro-do-mato	-	-	-	END
Tarphius azoricus	Escaravelho-dos-fungos	Ironclad beetle	Yes	-	END
Trechus isabelae	Carocho cavernícola	-	Yes	-	END
Trechus terceiranus	Escaravelho cavernícola	Ground-beetle	Yes	-	END
Turinyphia cavernicola	Aranha-cavernícola	-	Yes	-	END
	Vertebrates (Birds	s, Mammals)			
Scientific name	Nome Comum	Common Name	Protected	P	Status
Buteo buteo rothschildi	Milhafre, Queimado	Buzzard	Yes	X	END
Columba livia atlantis	Pombo das rochas	Rock dove	Yes	-	END
Columba palumbus azorica	Pombo Torcaz dos Açores	Azores wood pidgeon	Yes	X	END
Fringilla coelebs moreletti	Tentilhão-comum	Chaffinch	Yes	X	END
Larus michahellis atlantis	Gaivota-de-pernas-amarelas	Yellow legged gull	Yes	-	END
Motacilla cinerea patriciae	Alvéola-cinzenta, Lavandeira	Grey wagtail	Yes	-	END
Nyctalus azoreum	Morcego dos Acores	Azorean hat	Voc	-	ENID

Morcego dos Açores

Painho-de-monteiro

Priôlo

Estrelinha

Estrelinha

Estorninho-malhado

Toutinegra, Avinagreira

Melro-preto

Nyctalus azoreum

Oceanodroma monteiroi

Pyrrhula murina

Regulus regulus inermis

Regulus regulus santae-mariae

Sturnus vulgaris granti

Sylvia atricapilla gularis

Turdus merula azorensis

Azores migratory species of Birds

Azorean bat

Monteiro's storm-petrel

Azores bullfinch

Goldcrest

Goldcrest

Starling

Blackcap

Black bird

END

END

END END

END MAC, END

END

END

Yes

Yes

Yes

Yes

Yes

Yes

Yes

	Aquatio	species			
Scientific name	Nome Comum	Common Name	Protected	Р	Status
Anas acuta	Arrábio	Northern Pintail	Yes	-	i
Anas americana	Piadeira-americana	American Wigeon	-	-	ir
Anas crecca	Marrequinha	Eurasian Teal	Yes	-	ir
Anas discors	Marreca d'asa azul	Blue-winged Teal	-	-	ir
Anas penelope	Piadeira	Eurasian Wigeon	Yes	-	ir
Arenaria interpres	Rola-do-mar	Ruddy turnstone	Yes	-	mr
Aythya collaris	Zarro-de-colar	Ring-necked duck	Yes	-	i
Bubulcus ibis	Garça-boieira	Cattle egret	Yes	-	i
Calidris alba	Pilrito-das-praias	Sanderling	Yes	-	mr
Calidris alpina	Pilrito-de-peito-preto	Dunlin	Yes	X	mo
Calidris canutus	Seixoeiro	Red Knot	Yes	-	mr
Calidris fuscicollis	Pilrito de Bonaparte	White-rumped Sandpiper	Yes	-	mr
Charadrius hiaticula	Borrelho-grande-de-coleira	Common ringed plover	Yes	-	mr
haradrius semipalmatus	Borrelho-semipalmado	Semipalmated plover	Yes	-	mr
Egretta garzetta	Garça-branca-pequena	Little Egret	Yes	X	mr
Gallinago delicata	Narceja de Wilson	Wilson's snipe	-	-	mr
Limosa lapponica	Fuselo	Bar-tailed Godwit	-	-	mr
Limosa limosa	Maçarico-de-bico-direito	Black-tailed Godwit	Yes	-	mr
Numenius phaeopus	Maçarico-galego	Whimbrel	Yes	-	io
Plegadis falcinellus	ĺbis-preta	Glossy ibis	-	-	mo
Pluvialis squatarola	Tarambola-cinzenta	Black-bellied Plover	Yes	-	mr
Tringa flavipes	Perna-amarela-pequena	Lesser Yellowlegs	-	-	mr
Tringa nebularia	Perna-verde	Common greenshank	Yes	-	mr
Vanellus vanellus	Abibe	Northern lapwing	Yes	-	io
	Marine	species			
Larus delawarensis	Gaivota-de-bico-rosado	Ring-billed gull	Yes	-	ir
Larus ridibundus	Guincho-comum	Black-headed gull	Yes	-	ir
Morus bassanus	Ganso-patola, Albatroz	Northern gannet	-	-	mo

Azores breeding species of Birds

	Terrestrial/Passer	ine Species			
Scientific name	Nome Comum	Common Name	Protected	Р	Statys
Carduelis carduelis	Pintassilgo	Goldfinch	Sim	-	N
Carduelis chloris	Verdilhão	Common Greenfinch	Sim	-	N
Erithacus rubecula	Vinagreira	European robin	Sim -		N
Estrilda astrild	Bico-de-lacre	Common waxbill	-	-	N
Oenanthe oenanthe	Chasco-cinzento	European wheatear	Sim	-	N
Passer domesticus	Pardal	House sparrow	Sim	-	N
Serinus canaria	Canário-da-terra	Canary	Sim	-	MAC
	Terrestrial/Non-pass	serine Species			
Alectoris rufa	Perdiz-vermelha	Red-legged partridge	-	-	N
Asio otus	Mocho	Long-eared owl	Yes	-	N
Coturnix coturnix	Codorniz dos Açores	Common quail	Yes	-	N
Psittacula krameri	Periquito-rabijunco	Rose-ringed parakeet	-	-	N
Streptopelia decaocto	Rola-turca	Eurasian collared dove	-	-	N
	Wetlands Sp	ecies			
Anas rubripes	Pato-escuro	American black duck	-	-	N
Anas platyrhynchos	Pato-real	Mallard	Yes	-	N
Ardea cinerea	Garça-real	Grey heron	Yes	-	N
Charadrius alexandrinus	Borrelho-de-coleira-interrompida	Kentish plover	Yes	X	N
Charadrius vociferus	Borrelho-de-coleira-dupla	Killdeer	-	-	N
Fulica atra	Galeirão-comum	Eurasian coot	Yes	-	N
Gallinago gallinago	Narceja-comum	Common snipe	Yes	-	N
Gallinula chloropus	Galinha d'água	Common moorhen	Yes	-	N
Scolopax rusticola	Galinhola	Woodcock	Yes	-	N
	Marine Sp	ecie			
Bulweria bulwerii	Alma-negra	Bulwer's petrel	Yes	X	N
Calonectris diomedea borealis	Cagarro	Cory's shearwater	Yes	X	N
Oceanodroma castro	Angelito, Paínho da madeira	Madeiran storm-petrel	Yes	X	N
Onychoprion fuscatus	Garajau-de-dorso-preto	Sooty tern	Yes	-	N
Puffinus baroli	Frulho	Barolo shearwater	Yes	X	MAC
Puffinus puffinus	Estapagado	Manx shearwater	Yes	X	N
Sterna hirundo	Garajau comum	Common tern	Yes	X	N
Sterna dougallii	Garajau rosado	Roseate tern	Yes	X	N

Bryophytes species

Scientific name	Nome Comum	Common Name	Protected	Colonization status
Breutelia azorica	-	-	-	n
Neckera intermedia	-	-	-	n
Polytrichum commune	Musgo pinheirinho	Haircap moss	-	n
Sphagnum spp.	Musgão, Leiva	Peat moss	Yes	END

END	Azores endemic species
MAC	Macaronesian endemic species
mr	Regular migratory specie
mo	Occasional migratory species
ir	Regular wintering species
io	Occasional wintering species
N	Nesting species
n	Native species
i	Invasive species
d	Unknown species
P	Priority taxon for conservation



