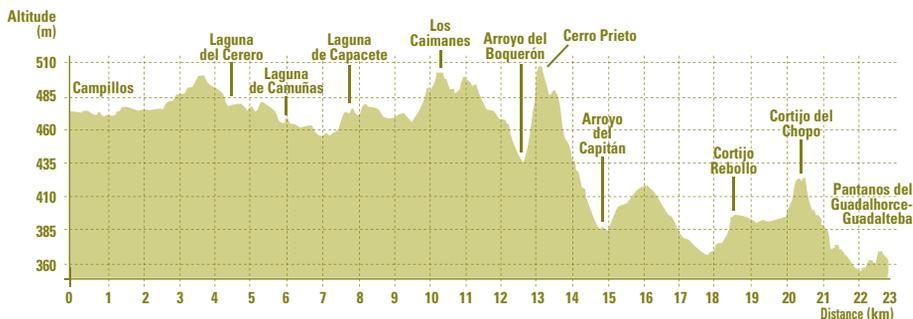


19 CAMPILLOS • CAMPILLOS (Embalses del Guadalhorce)

Lagunas de Campillos and the Embalses del Chorro



ESTIMATED TIME
5 hours 15 minutes



LONGITUDE (km)		ALTITUDE AND ELEVATION (m)			
Length	23	Accumulated ascent	255	Final altitude	360
Ascent km	7.8	Accumulated descent	360	Maximum altitude	515
Descent km	10.7	Maximum difference	160	Minimum altitude	355
Flat km	4.5	Altitude at starting point	475	Average altitude	435

» Summary of this Stage «

Water is the central character of this stage, either as the string of endorheic lakes in the Natural Reserve of Campillos Lagoons or the splendid area of wetlands, where the Guadalhorce, Guadalteba and Conde de Guadalhorce reservoirs are located.

The surroundings are quite flat, slightly inclined towards the water surface, and mainly composed of earthen hills with occasional limestone formations and outcrops, and a few spots of emerging gypsum. The walk heads south from Campillos, with some twists and turns to visit lagoons or avoid cultivated fields and some infrastructures towards the end.

There is a succession of ascents and descents during the long 23 kilometres especially at the end. There are a couple of fairly steep slopes and a stretch of road.

» Highlights of this Stage «

This stage adds to the previous ones by giving you an almost complete picture of the lagoons in the northern part of the province of Málaga. At this stage you will visit directly 3 of the lagoons which are protected as part of the Reserva Natural de las Lagunas de Campillos and a couple more, which are not included in the network of protected natural areas. The landscapes, colourful and unexpected amidst the dry fields, are well worth the effort. >

							
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Pictograms description MIDE, pages 11 & 17

➤ Next you arrive at the reservoir area, walking through the hills that separate the basin of the river Guadalhorce from the Guadalteba, crossing tributaries of both Arroyo Boquerón and Capitán respectively. The sandstone ridge planted with pine trees, which separates the Guadalteba reservoir to the west, and the Guadalhorce to the east, offers really picturesque views over the latter reservoir. The end of the stage, at the bridge that separates and unites at the same time the two vast sheets of water, could not be any more spectacular.

- **Starting point:** the southeast area of Campillos, where Dr. Óscar Fernández and Baltasar Peña streets meet.
- **Access to starting point:** the roads A-384, from the A-92 up to the level of Antequera, and the A-357 which leads to Málaga via Carratraca.
- **Finish point:** Guadalhorce and Guadalteba reservoirs just before the shared dam.
- **Access to finish point:** from Málaga the MA - 5403 road connecting Ardales with Estación del Chorro. Then follow the directions for the reservoirs (Pantanos) along a service road. There is an access from Campillos off the A-357 along another reservoirs service road, the A-7286.
- **Possible "escape routes":** The A-7286 road that you cross at km 7.5 takes you to Campillos in a few kilometres to the right. Another easily identified point is the junction of the A-357 with the road mentioned earlier (as it makes a semi-circle which ends here). This point is reached when you cross the Arroyo del Capitán, near a farmhouse. Then, as you wander through the pine wood, there is always a tarmac road you can reach by walking westwards.
- **No return point:** from the pine forest of the hill Cerro de La Laguna de Panza onwards, turning back is not a good idea. It is best to continue even though there is a hard ascent followed by a long descent.
- **Maps: 1022-IV** (Campillos) to locate the starting point only, then turn to **1023-III** (Bobadilla-Estación). The remaining half is on map **1038-I** (Pantano del Chorro).
- **District boundaries:** you are within Campillos boundaries all day long.

Esparto grass fields and stony patches beside the Great Path of Málaga



• Enjoy the walk safely

There are a couple of fords across Arroyos del Boquerón and Capitán, which do not pose a serious obstacle, given their meagre flow. Another story is the level crossing lacking automated barriers across the Málaga-Seville train line. The section of the railroad tracks is completely straight, but in case of low visibility, it is advisable to look for an overpass towards the west which means a detour of about two kilometres. Follow the A-7286 as it passes over the railroad line and then follow the track which will take you back to the other side of the level crossing.

On the other hand, you will cross the A-7286 road just after the level crossing and, paradoxically, it is the same road you will be walking along for about two kilometres and a half until reaching the track to Pinares de Rebolo. In all these above-mentioned cases you should take extra precautions. There is not a single drinking water supply point during the whole stage, which, as you know, is quite long.

• Connections to other footpaths and trails

There is a circular walk (not sign-posted) which enables you to get to know all of the sites of the



Flamingos swimming in deep waters

Natural Reserve of the Lagunas de Campillos, and it coincides in part with the GR.

In terms of traditional public roads, up to Cortijo de Cerero (km 5) you will be walking along the old Camino de Campillos to Antequera, eastward. The section leading south continues and connects later with Realenga de Carratraca, which leads up to Cortijo de Capacete (km 8.3). Earlier on, at the Laguna de Camuñas, there is a junction with the Cañada Real de Granada coming from the southwest, which then continues separately. From the point where you cross Arroyo del Boquerón until arriving at Arroyo del Capitán, the path is called Camino a Cerro Prieto.

THE RIVERS AND THE WATER

The Arroyo de Boquerón and the Arroyo de Capitán are the two sole watercourses of the stage, similar in a way, as both flow into the shallow ends of reservoirs; the first one flows into the Guadalhorce and the second into the Guadalteba. Neither of them harbour any well-preserved galleried woods, only some tamarisk and elm, and, above all, brambles, reeds and bulrushes.

The vegetation perimeter around the lakes which can be visited by tourists has been strengthening over time thanks to the lakes being protected. The vegetation belt is very narrow though, due to the

harsh environmental conditions that cause cycles of floods and drought, the relentless wind and the saline nature of the soil. In those lagoons with extensive water surface and little depth it is easy to observe thickets of tamarisk of varying density, a plant which is a real specialist in this type of habitat. The bulrush require deeper water, which they conquer with their thick runners, while the reeds colonize very extensive areas, at times reaching a tangled mass of stems which potentially offers a good hideout for wildlife.

Flamingos can be easily observed during the season when they turn into resident birds at the lagoons, as well as the Purple Heron, various Egrets, Coots and Moorhens with their dark plumage which are the most abundant along with ducks. Finally, the waders wander along muddy shores deploying a whole repertoire of hunting tactics.

The reservoirs on the other hand battle with the problem of considerable differences in water level so that the vegetation can become non-existent in many areas: at the dam end of the reservoirs, on steep inclines or on rocky ground, as you will see during this stage. At the tip of Guadalteba, Guadalhorce and Conde de Guadalhorce reservoirs (especially at the latter two) there are dense clusters of tamarisk at the deltas of the Guadalhorce and the Turón. The



Camuñas Lagoon seen from a hillock beside the road

reservoirs have settled as aquatic ecosystems as a result of human action which did not particularly aim for this result.

Although the track does not reach the Gaitanejo reservoir, which is located below the three dams, note that it maintains more constant water levels thanks to being regulated and thus it has managed to sustain a diverse galleried wood with the tamarisk being the dominant tree.

WALK DESCRIPTION

» Las lagunas de Campillos

The walk follows the long street of Dr. Óscar Fernández direction southeast, passing on the left some industrial buildings and on the right recently built housing estates. As it becomes a track, it leads east, veers slightly to follow Camino de Antequera in the area called Velasco and passes the farmhouse de la Rondana on the right (km 2.7). The first lagoon, Laguna del Cerero, is passed on your right, and it is named after a nearby farm (km 5) where there is a major junction.

At the junction take the track southwards. Dry, reddish-coloured farmland harbours young olive groves, which are watered with a drip system during their first years of growth. The uncultivated patches called

Dry farmland and olive groves surround the Nature Reserve of Camuñas Lagoon



“herrizas” are frequent here in places where bedrock has emerged. There aren’t many large oaks, if anything you can encounter small woods of trees of the same size and age, scrub, or fields of esparto grass.

These islands of native vegetation on rocky crags lend greater diversity to the place and constitute a good refuge for many animals, some of them hunting species. Next the walker encounters the quite small basin of Camuñas lagoon. Then you reach two consecutive junctions, first with the train tracks and then the A-7286.

Next to the crossroads at the Cortijo de Capacete (km 7.5), to the west, there is the Capacete Lagoon, the last one of the protected lagoons within the nature reserve. It is a good sized one, similar in size to Cerero, so both are able to retain water well into the summer. Passing the Hoyo del la Alberca on the right and the Llano de Farfán on the left the track climbs a small hill (km 11), called Cerrete de los Caimanes which is planted with almond trees. After descending and leading along successive tracks the walk takes you to the plain where the Panza Lagoon is struggling to survive; it is one of the smallest and shallowest ones.

» Arroyos de Boquerón and Capitán

Following a little stony path along slopes of dense planted woods of Aleppo pine on the left, arrive at the first ford across the Boquerón Stream, which shouldn't pose too many problems. What comes next is a steep slope through an olive grove up the elongated summit of the Cerro Prieto (km 13.5), which you follow to the right until you reach a dirt track which turns westwards. This area must have

Clay soil of various colours with the Sierra in the background



boasted a productive olive grove some time ago, but now the trees are mixed with gorse, cistus, broom and thyme on a hill exposed to the winds. When you begin the descent, the landscape changes to mountains and farmland hills of different shades until you arrive at the Arroyo del Capitán, which flows on the side of a road again.

» Pine woods and Reservoirs

Follow the A-7286 road for about two and a half kilometres, ignoring two junctions on the left (the first goes to Parque de Guadalteba and the second is a small service road which leads to the dam end of the reservoirs, which are the final destination later in the stage). At the km marker 17.5 the tarmac ends. There are two farmsteads in this section; the first one is Cortijo de Rebolo on the right. Enter the pine forest, which keeps getting denser and the trees become more exuberant with every metre. Undergrowth appears little by little, however the best area to catch a glimpse of what the biodiversity must have been like here, is the sandstone rock which has not been reforested. As you ascend in a zigzag to the threshing circle and the ruins of El Chopo farm (km 20.5), note the interesting scrubland of thyme, buckthorn, Mediterranean

Guadalhorce reservoir, the distant view of your destination



Dwarf Palm and Esparto grass thriving in the shelter of a few rocks.

There are a couple of places from where you have a good panoramic view of the Reservoir of Guadalhorce; one of them is the threshing circle at the second farmhouse. Walk downhill by a prehistoric cave dwelling and reach a crossroads where you abandon the dirt track and take a path. Shortly before an area with broad views where the path twists there is another ruin which had been built in a natural hole in the ground, saving the labour of having to build higher walls. You can still see the various strata of lime and azulina. The path follows the contours and the level of the lake which is getting closer, but it is best to keep walking a few metres at this level until you reach the road again. Here you can abandon



Bridge joining the Guadalhorce and Guadalteba reservoirs

the hill which separates the Guadalhorce and the Guadalteba reservoirs and reach the end of the stage just at the point where two dams of these twin reservoirs meet. ○

LIST OF GPS POINTS OF THIS STAGE (UTM)

1 Campillos Óscar Fernández street	30S 0334702 4102420	475 m	2 Mirador Laguna del Cerero, viewpoint	30S 0338496 4100896	486 m
3 Laguna de Camuñas	30S 0338764 4099889	465 m	4 Level crossing	30S 0338284 4099371	460 m
5 Detour to la Laguna de Capacete	30S 0337853 4098589	470 m	6 Cerro de los Caimanes, hill with almond trees	30S 0338479 4096537	500 m
7 Cerro de la Laguna de Panza, hill	30S 0338926 4095689	475 m	8 Arroyo del Boquerón, stream	30S 0338351 4095156	435 m
9 Puerto de Cerro Prieto, pass	30S 0337135 4102727	500 m	10 Arroyo del Capitán and the lake/reservoir road	30S 0336952 4093865	380 m
11 Inicio del Carril de Rebolo, start of the dirt track	30S 0338910 4093203	375 m	12 Cortijo de Rebolo, farmhouse	30S 0339495 4092600	400 m
13 Cortijo del Chopo, farmhouse	30S 0340005 4091555	425 m	14 Cave dwelling	30S 0340115 4091023	395 m
15 Bridge between two lakes	30S 0339499 4090191	360 m	16 Dam end of the Guadalhorce and Guadalteba Reservoirs	30S 0339794 4089821	360 m



The Gaitanejo reservoir, in the background the Guadalhorce and scattered tafonis holes and sandstone arches

La Gran Senda de Málaga in the Paraje Natural Desfiladero de los Gaitanes

Paraje Natural, the Natural Area of Desfiladero de los Gaitanes, was created in the year 1989 protecting 2016 hectares at the western end of the Central Limestone Arch. The limestone layers stacked vertically during the Alpine formation have become a major obstacle to the circulation of the rivers, which had to manage to avoid the two crags via two gorges. These are Gaitanes, two sections of gorges over 800 meters long with walls up to 350 metres high. In between, the valley widens into so-called La Hoya and the river twists until it meets the second rocky mass at 300 meters high and several hundred metres long. Although it is wider and shorter than the upper gorge, this second gorge's formations are much more spectacular as its strata are completely vertical. The Caminito del Rey walkway winds around to fit the protruding and recessing rock. The representative areas of the Tres Techos and el Recodo can be considered as synonyms of the name the Gaitanes. The Gaitanejo, on the other hand, is a small gorge excavated in a different set

of rocks: sandstone and calcareous conglomerate, located below the dams. It harbours remarkable riparian vegetation and there are cave dwellings below the ledge.

In this first section of the Paraje numerous plant and animal species exist, notably the large raptors and plants with limited distribution such as *Rupicapra africana*. But the Natural Area does not only consist of the gorges, accessible through the Caminito del Rey. The Great Path of Malaga is responsible for opening up other landscapes to the hiker.

The first section of the walk circles the great mass of las Sierras Llana, Valle Abdalajís and the Huma, the latter is the highest. Karstic modelling is the main attraction, with numerous cliffs, some of them very large. In general, the planted woods of Aleppo pine trees dominate the landscape at the beginning and at the end, near the dams, but summits and sierras hold a wide range of vegetation with the outstanding Phoenician Juniper (*Juniperus phoenicea*) forming extensive thickets between the sinkholes and torcales.

The Griffon Vulture and the Spanish IbeX are the most easily observed animals in the rocky cliffs. In the northern part and, above all, in the west of the Paraje Natural you can find sandstone and calcareous conglomerate from the upper Miocene of the Tertiary era. These are straw-coloured sedimentary rocks which darken quite a bit as they weather, and show a soft modelling where fluvial cuts and different sized holes appear, forming caves, shelters, tafonis and alveoli. The susceptibility of the rocks to weathering and the inclusion of clay pebbles or other soft materials make the landscape of the Sierra de Almorchón an attraction on its own. It is this type of varied surroundings that stage 21 passes through; you walk among Aleppo pines, reservoirs, and superb archaeological findings such as the rock shrine and the walled town of Bobastro.

The main features of the upcoming two stages are the reservoirs, a total of 6, all very different yet very close to one another. In order

to understand the name El Chorro that refers to the entire area and the train station, one should go back to the 19th century, when the dam had not even been built. The river Guadalhorce from the north, Guadalteba from the west and Turón from the south converged at the entrance of the first gorge, Gaitanejo, carved out in the sandstone rock. During heavy rainfall, a common occurrence in the mountains of Málaga, the water accumulated in the narrow gully just before the first Gaitanes gorge and then the same thing happened at the second gorge, a kilometre and a half down the river. The output on the other side had such momentum and caused such uproar because of the released water pressure that the inhabitants of the area named the place El Chorro (The Jet) and it was much feared due to its devastating effects on crops and properties downstream.

This has all changed in a very short time period, given that the area was no longer inaccessible when the train line was built, connecting Malaga with Córdoba through the Bobadilla (Antequera) hub of train connections. The work was divided into three phases, the two close to both province capitals, quite easy to accomplish on level terrain, and then the phase located here, which took somewhat longer to complete. In 1865 the work was finished and next it required the construction of numerous bridges (some of them very beautiful) and many tunnels cutting through the entire sierra.

The two train stops, one located to the north, Gobantes, and to the south, El Chorro, are the results of a more expensive undertaking: crossing the Central Limestone Arch from both ends.

As for the reservoirs, the Conde de Guadalhorce was the first to be inaugurated by King Alfonso 13th, in the spring of 1921. The service road called Los Balconillos, the pipeline (1905) and reservoir itself (1917) made such an impression on the King that he established

La Hoya between upper and lower gorges (lower one in the photo) of los Gaitanes with the river Guadalhorce and the train line



Condado de Guadalhorce (county) in the name of the chief engineer Rafael Benjumea. In 2014 the Diputación de Málaga began the restoration of the so-called Caminito del Rey to make it accessible to the public safely. However the dam itself is not far behind as far as beautiful architecture is concerned, with its double arcade of masonry resulting from additional works done in 1944. Both constructions are very close to the beginning of stage 20 and a vantage point allows you to see the whole complex.

The reservoirs of the Guadalhorce and Guadalteba were finished in 1966 and are located at highest altitude of the complex before the gorge. As far as the waterfalls or spillways (saltos de agua) are concerned, Salto de El Chorro started working in the year 1904, at the outlet of the Desfiladero de los Gaitanes, and the project engineer himself, Rafael Benjumea, designed the Salto de Gaitanejo in 1924. The Contraembalse of Tajo de la Encantada, at lower altitude, and its complementary Villaverde reservoir began working in 1978. These last two are further down the gorge.

The afore-mentioned Gaitanejo reservoir collects water which circulates through a

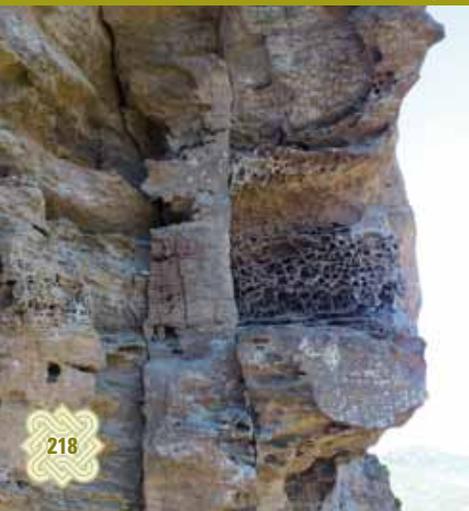


In the Gaitanes gorge

large gallery that perforates the rock of the first gorge along its right margin. Between the first and second gorge there is a spacious valley called La Hoya. A train tunnel used to come out to the outside of the rocks here and then ran along a deep disused channel. Then it penetrated the rock walls of the Cerro del Cristo. It is now completely underground and then comes out and must cross to the other side of los Gaitanes, given the location of the electricity plant at the eastern margin of the Guadalhorce. That is the bridge that can be seen from El Chorro passing through the thin air, an aqueduct which is accessed through los Balconillos, later renamed as Caminito del Rey. The water, after a significant fall of about 100 meters achieved using 2.6 kilometres long hydraulic conduct, enters the turbines of the Central Eléctrica Nuevo Chorro, at the end of the lower reservoir, called Contraembalse.

Another reservoir, and a really spectacular one, is responsible for the second waterfall, in the east, with the potential energy of 350 metres of altitude within a little over 1 kilometre of reinforced piping; a structure that the Great Path takes you to at the beginning of the ascent to the Mesas de Villaverde. In reality, the upper reservoir or Presa de

Curious shapes caused by alveolar (honeycomb) erosion on the sandstones of the Pico Capilla



Villaverde works as a battery, accumulating the energy generated by the water pressure to be used during peak demand periods and taking advantage of low demand time to release the pressure avoiding overloading. From the penstock you can perfectly see the central hydroelectric plant, La Central Hidroeléctrica del Tajo de la Encantada, entering the reservoir. The plant's turbines are 15 floors below the water level and always receive the same amount of flow. The large surge shaft placed where the pipeline runs underground, acts to balance and minimize the water hammer effect. This method had been needed before the use of reinforced high pressure pipelines.

The electric substation of the Tajo de la Encantada is located downstream at the lower reservoir, about two kilometres from the dam on the left bank of the Guadalhorce. From some points of the route, it is possible to have a good view of the reservoir and the substation which forms part of a set of 5 substations, two more in the Guadalhorce and two more in the Rio Grande; this substation is still the main hydroelectric resource of the province.

The other function of the reservoirs is to regulate the irrigation water in the



Erosion causes smooth wavy patterns in the sandstone rock and hollows used as temporary shelter

region of Guadalhorce. Under the dam of the Contraembalse of the Tajo de la Encantada there are some sand trap interceptors for the first irrigation channel which starts here, and then it is followed by many others downstream on both banks of the river. The capital of the province also receives drinking water from the hydraulic complex, which used to have a slightly salty taste due to a contributing water spring coming from a gypsum deposit, which was later sealed.

Sports, tourism, and environmental implications of the Paraje Natural began from the moment the area became accessible through the Caminito del Rey. It was the rock climbers from Málaga who have prepared a large number of climbing routes at all difficulty levels and hundreds of metres high in some cases. This gave El Chorro international recognition, with the added value of its good climate. The Great Malaga Path allows you to visit some of these places. Walking has been gaining new enthusiasts with the suggested itineraries along the GR-249; the ascent to the Huma and the Gaitanejo footpath as main features. But water sports and sport fishing in the three northernmost reservoirs are the most popular activities, along with increasingly significant birdwatching. ○

Rock-dwelling plants and people use the rock overhangs for shelter

