



Butterflies

along the

Great Malaga Path



DESCRIPTIVE CATALOGUE

José Manuel
Moreno-Benítez



M
diputación de Málaga





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2017

© EDITING AND CO-ORDINATION:

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All photos are property of José Manuel Moreno-Benítez, except where otherwise stated.

Photos on the front of the book (left to right and downwards):

Small Copper, Old World Swallowtail, Southern Blue, and Black-veined White (at the map).

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First edition: November 2017



Running after butterflies
is not the key...
You should look after the garden
so they would come to you.

Mario Quintana, Brazilian poet

Argynnis pandora in the Tejada Mountains





Acknowledgments

A lot of people have been necessary to carry out a project like this one - starting from the technicians and other staff who work for the Department of Environment and Territory Promotion of the Málaga County Council, especially Jacinto Segura Moreno, to the fans of butterflies who helped and improved this book by sending photos. The following list includes their names in order of appearance: Elena Gallego Domínguez, Raúl Toledo Sánchez, Rafael Obregón Romero, José Antonio Ríos Bosquet, Juan Manuel Sánchez Velasco, José Rodrigo Dapena, Francisco Ríos Bosquet, Francisco de Erit Vázquez Toro, Blas López Soler, Francisco Rodríguez Luque, Eduardo Marabuto, José Álvarez Gandara,

Mari Carmen de la Torre, José Manuel Sesma Moranas.

Special thanks to Elena Gallego Domínguez for her support during my working on this book, and to Rafael Obregón Romero for being willing to cooperate at all times. I am also very grateful to José Rodrigo Dapena for developing his blog on butterflies and caterpillars with no thought of personal gain, and for giving people the opportunity to learn many interesting things about these winged creatures (check <http://mariposasyorugas.blogspot.com.es/>).

Thank you all for devoting your time to the study, promotion and protection of the nature of Málaga.

THE AUTHOR

Large Skipper





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Western Dappled White



Presentation

Thanks to the actions performed by the Málaga County Council, the natural heritage in this province has been decidedly promoted for the last few years. Citizens were offered the opportunity to get to know and enjoy this land in a sustainable way, and with due respect for its environment, through several projects such as the Great Málaga Path, the refurbished El Caminito del Rey, or the Coastal Path. This 'Identification Guide to the Diurnal Butterflies along the Great Málaga Path' forms part of the above actions, and approaches the diversity and colourfulness of these beautiful creatures, which flutter around the countryside, in the mountains and above the ways that belong to the Great Path.

The book follows the one about the birds along the Great Path,



only that this time we chose winged insects, which are deeply admired by people due to their wonderful elegant colourful wings. Our aim is the same, and it consists of not only presenting the great variety of butterflies that can be spotted along the Great Path but also of making people realise how important these beautiful insects, together with other small or big creatures, are for the correct development and future survival of ecosystems.

I would only like to add that I invite you all to admire extraordinary colours and wing patterns of the butterflies that decorate these pages, learn about their more than interesting life cycle, and see that we all need to appreciate, esteem, and protect all beings that belong to our environment.

Elías Bendodo Benasayag

PRESIDENT OF THE
MÁLAGA COUNTY COUNCIL

Marsh Fritillary



Introduction

Then talking about animals, people usually refer to mammals, birds, and fish, if aquatic habitats are included. These are followed by vertebrates, amphibians, and reptiles, while invertebrates are few steps behind. They, and above all insects, are still considered to be harmful for humans. Nothing could be further from the truth. It is well known among scientists and some other sectors of society that invertebrates, which are scornfully called 'bugs', play an important role in ecological balance, and some of them are crucial for the human race.

This book is on diurnal butterflies, which belong to the above group of beings, and are vital for our planet and people. This is mainly due to pollination as some plants can be only pollinated by certain kinds of butterflies. They are also important for the rest of creatures because they form part of food chains together with many other animals, like birds. Also important, but less famous, is their role in plant consumption. Most butterflies feed on plants during their early stage, as caterpillars. Therefore, they are decisive for achieving ecological balance. Without caterpillars, plants that easily adapt to different kinds of climate would spread over the land and leave no space for other species, which would seriously affect the biodiversity.

There are 110 diurnal butterflies' species in Málaga. This is not a significant number unless it gets compared with the number of butterflies in Andalucía and the Iberian Peninsula, in which case it represents 75% and 48% of butterflies, correspondingly, in these zones. Actually,



three out of every four Andalusian butterflies and almost half out of all Iberian ones can be seen in Málaga. Considering that our province is the smallest in Andalucía, the above data is not to be underestimated. Nevertheless, the number of species is not the only thing which is important. There is also to add the features of

these species, which are or endangered of protected endemic Iberian or Maghrebi species. Andalusian Anomalous Blue from the Almirajara Mountains in Málaga outstands as it is an endemic species in the region.

This book is meant to lead you through the incredible world of butterflies, using the Great Málaga Path as a way to approach it. The path, which is 650 km long, goes through rather varied scenery and brings us the opportunity to observe a large part of the diurnal butterflies in the province. Thanks to the guide, you can not only watch them but also find out which is the species you are observing in a simple way, very different from any complex instructions or specific language that is difficult to understand. There are clear descriptions followed by visual keys and details which will help you make difference between similar species. Of course, there is also information regarding butterflies' behaviour, which is of great importance for getting to know them, and the first and major step towards loving them and feeling the need to protect them.

Marina Bravo Casero

ENVIRONMENT AND TERRITORY PROMOTION
REPRESENTATIVE FOR THE MÁLAGA COUNTY COUNCIL



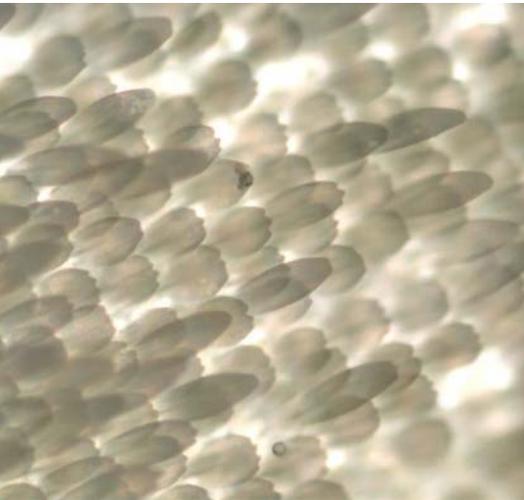
Small Copper / Common Copper



What is butterfly?

Diurnal butterfly is a common name that refers to *Lepidoptera Rhopalocera*. The name comes from Latin nouns *lepis* (wing), *pteron* (scale), *rhopalus* (knobstick) and *ceros* (antenna). Therefore, the Lepidoptera

order includes insects with scales on their wings, and the Rhopalocera clade those insects that have antennae which are club shaped at their ends. This group of butterflies is called diurnal, as they are active during the day.



Scales. Photo: Elena Gallego Domínguez

Other lepidopterans are moths or nocturnal butterflies as they are mostly active during night. They are called Lepidoptera-heterocera because of *heteros* (different) and *ceros* (antenna), as their antennae are not club shaped as diurnal ones. Nevertheless, this is not the case of the Zygaenoidea superfamily, which are a controversial

Clubbed Antennae



kind of topic for scientists. They are also diurnal and have clubbed antennae, but some of their features make them fit in nocturnal group of moths and butterflies. Not long ago, these moths were considered to be Rhopalocera, but it seems that scientists have agreed recently on considering them Heterocera.



Different kinds of nocturnal butterflies' antennae: From left to right: filamentous, comb-like (photo: Raúl Toledo Sánchez) and feathered antennae.



How can you make a difference between diurnal and nocturnal butterflies?

Beside the fact that they are active during the day and the shape of their antennae, the main feature which helps making a difference between diurnal and nocturnal butterflies is the position of their wings when they are still. Diurnal butterflies keep their wings in vertical position at right an-

gles to their body so the front of them can be seen. Nocturnal butterflies' wings are horizontal parallel to their body. They stretch backwards and cover the body and the hindwings, or make a cross with all the wings stretched out so the back of them could be seen.



Diurnal butterfly resting, with wings in vertical position at right angles to the body so the front part of them can be seen, and two nocturnal butterflies whose wings are in horizontal position parallel to their body so the back of the wings can be seen.



Butterfly Life Cycle

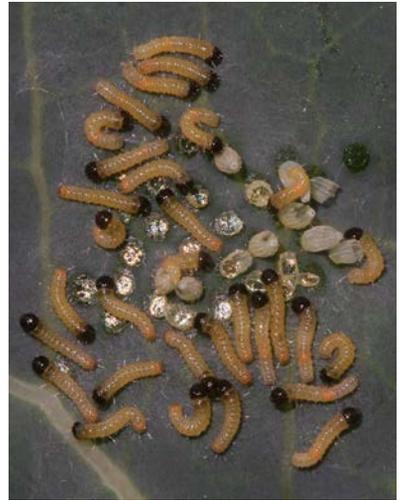
As many other invertebrates, butterflies go through three different cycles before the adult stage. These are egg, caterpillar and chrysalis.

Egg. Butterflies' eggs can have different shapes, such as round, oval or flattened, and textures, like smooth, with vertical ribs, or rough. They are normally laid on the plants which caterpillars use as food or on stones, ground or grass. Nevertheless the first option is the most common, as butterflies carefully choose parts of foodplants, stems, leaves of flowers, where to lay their eggs alone or in groups. Caterpillars hatch out in few days, although some species' eggs hibernate over the winter so the incubation period is over after the cold months.



Different types of eggs: barre-shaped with vertical ribs (the Cabbage White), round (the Two-tailed Pasha), flattened and with rough surface (the Green Hairstreak). *Photo: Rafael Obregón Romero.*

Caterpillar or Larva. Some species caterpillars hatch just few days after the egg is laid, and their cycle is concluded in few weeks. Other species breed, eat a little and get in the state of dormancy during periods with reduced food availability, extreme weather conditions or winter. This phase is called *diapause*.



Recently hatched Cabbage White caterpillar.
Photo: Rafael Obregón Romero.

After breeding, small caterpillars start eating. Some of them take the first bite of the eggs' hard shell called chorion, and then immediately start eating plants. The species can be polyphagous, in other words, they have host plants from different families; oligophagous, which feed on the same family plants, and monophagous, i.e. limited to feeding on just one species or genus as their source of food.



Caterpillars' only function is to eat. Therefore, they develop a strong jaw they use to chew parts of plants. They have three pairs of legs in the front part of their body, which they use to walk and to hold of a plant. Moreover, they have some 'false legs' called *prolegs*, which are placed along their body up to the anal end of the body. Their purpose is to help them keep a strong grip while eating, as a kind of suckers or small hooks. Some species have tentacles, which can be placed close to the head, or at the back part close to the tail

end of the body. These 'horns' are used for protecting against predators, as they emit chemicals or give fake impression of something threatening like a dangerous creature, or they act as information antennae which caterpillars use to look for food. They can be flattened, with small knobs similar to small warts, hair or spines, which are used to protect from predators.

Caterpillars grow little by little, but their skin does not so it has to be periodically moulted. This phenomena is called *ecdysis*.



Different caterpillars. Up: Monarch; down left corner: Marsh Fritillary; left down corner: Large White or Cabbage White (photo: Rafael Obregón Romero).



Monarch butterfly after having moulted skin, conserve some typical features such as tentacles.

Caterpillars have insatiable appetite. They sometimes even eat more than necessary and have to go on a diet before starting the stage of chrysalis.



Chrysalis or Pupa. When caterpillars reach their ideal size and find a perfect location, pupation process

starts. Their shape gets completely different, similar to a small closed sack, after only few hours or days.



Different stages during the pupation of a Monarch butterfly.

Caterpillars often pupate on places where they can stay in vertical position, for example, on tree trunks and branches, bushes or even walls, street lights or tubes at construction sites or buildings. They hold on with the back

part, and their head is hanging, or they take hold of the object with their head up, using the back part of their body, while the middle part is connected to the surface by a thin silk thread. Some kinds can pupate parallel to the



Hanging Marsh Fritillary Chrysalis on the left and attached Green-striped White on the right.
Photo: Rafael Obregón Romero.



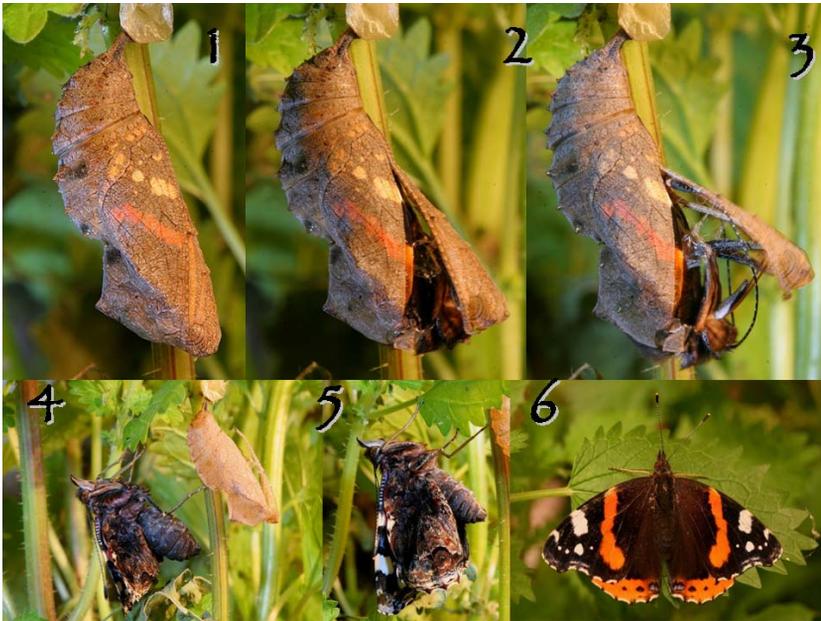
ground, between leaves, under stones or ground, and even in ants' nest.

The magical moment occurs during this stage. Inside of a chrysalis, after a complex biochemical process, the caterpillar's tissues are changed and it turns into an adult butterfly.

The chrysalis cycle can take several days or even months, as some species hibernate this way, and it becomes the most dangerous phase in their lives because they cannot escape to

protect themselves. When the moment is right, pupa's skin tears up and the adult butterfly comes out.

Adult Butterfly or Moth. When an adult butterfly emerges, it is wet and has wrinkled wings, which is why it immediately climbs to a protruding spot where it can get dry and pump liquid called hemolymph to its wings. This is when it also expels waste product generated during metamorphosis through anal zone.



Emerging of an adult Red Admiral. *Photo: Rafael Obregón Romero.*

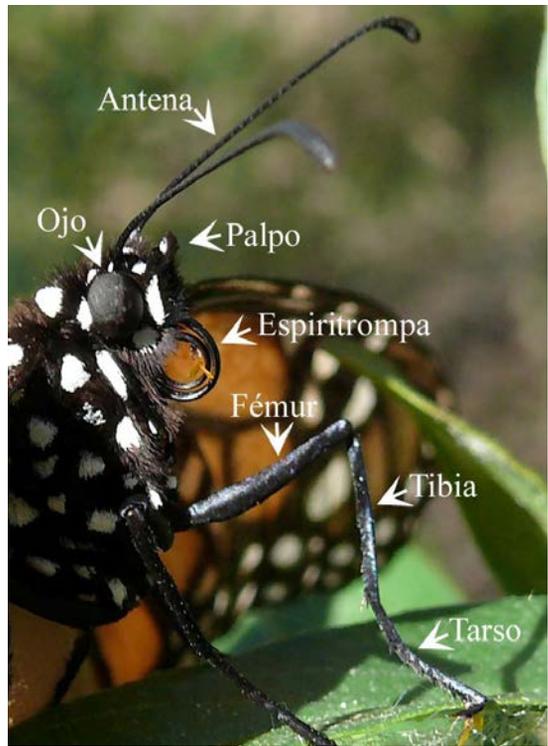
Very soon, little or nothing is left from what used to be a plant-eating caterpillar. The mouth on a caterpillar's head turns into a long proboscis used for sucking liquids. Butterflies or moths have two compound eyes, one on each side of the head, which serve to have a

panoramic view of their surroundings, but have no sharp vision as humans. Nevertheless, their eyes are sensitive to any sudden movement around them, which is why they fly away if there are in any kind of possible danger. Palpi and antennae are placed among the eyes, and



provide sense of touch and have chemosensory functions. Butterfly's head is normally covered in hair, which is actually modified scales. Their thorax, which is also hairy, has a rather hard shell which protects the vital organs.

In the lower part of their body, there are three pairs of legs. In the case of the Nymphalidae family, the front legs are passive, normally folded and cannot be seen, while the central and front legs are shown. Butterfly's legs are composed by several parts such as the femur, the tibia and the tarsus. The wings, which are the most attractive part of the butterfly due to its colour and patterns, are attached on the front part of the thorax. They have plenty of veins, which are or named or numbered (costa, radius, V1, v2, v3), the same as the space between them (discal area, s1a, s2b, s2, ...). The wings are also divided in varied areas (basal, discal, postdiscal, and submarginal) and have margins: *costa* (the front margin), *termen* and *dorsum* (outer and inner margins of forewings and hindwings). Other parts of the wings are called apex at the edges of the wings. Some families, above all Hesperidae and the Lycaenidae (gossamer-winged butterflies), have hairs on the edges of the hindwings,

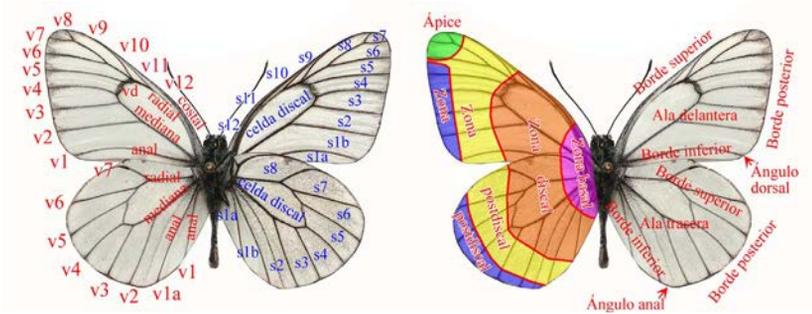


Parts of a butterfly's head and legs. The Monarch. Top to bottom: antenna, eye, palp, proboscis, femur, tibia, tarsus.

called *fimbriae*. Male butterflies have modified scales on their forewings, called *androconia*, which are sometimes darker and showier. The androconia's function is to emit pheromones in the air which attract female butterflies.

In this guide, we will use less specialized vocabulary in order to make the learning easier. Therefore, we will use the above terms such as discal area, front margin (*costa*), outer (instead of *termen*) and inner margins (instead of *dorsum*) of forewings and hindwings.

The abdomen is the softest part of the body where digestive system and



Names of the veins (v), spaces (s) and different parts of the wings. Left image, left wing, top to bottom: costa, radius, medius, anal, radius, medius, anal, anal. Right wing, top to bottom: discal area, discal area. Right image, left wing, left to right: apex (marked in green), postdiscal area (marked in blue), postdiscal area, basal area. Right wing, top to bottom: front margin, forewing, inner margin, inner angle (dorsum), front margin, hindwing, inner margin, anal angle. On the side: outer margins.

reproduction organs are. The female organ is thicker as there must be place for eggs.

The main function of an adult butterfly is reproduction and the conservation of

their species. Male butterflies and moths are usually first to born, few days before the females. The copulation between female and male butterfly starts rather soon after they come across each other.



Copulation between Essex Skippers.



Monarch laying eggs.

After the fertilization, female butterflies search for the place where to release and deposit eggs.

An adult butterfly can live from a few days to several months, and even a year as some species hibernate during this phase. Some species go far away in order to find their partner. Male butterflies sometimes also have to wait for

days before female butterflies emerge, so they need a lot of energy and mineral salt. They mainly sip flower nectar, but they also feed off decaying fruit and herbivores' and frugivores' (fruit eaters) excrement. Mineral salts can be found at different places, such as humid ground, human perspiration, and even in human and animal urine.



upper left corner: Cardinal eating nectar; the upper right corner: Two-tailed Pasha feeding on faeces composed of decaying fruit. Down: butterflies feeding on human perspiration (from left to right: Amanda's Blue and Southern Blue) and humid ground (Cardinal).

Butterflies and their Environment

Butterflies are tightly connected to the vegetation. We can stand that wherever there are plants, there are butterflies. The more varied plant life is in an area, the more diverse are its butterfly species. Therefore, equatorial regions, which are the richest in vegetation, stand out for the biggest diversity of butterflies. The further we go from the Equator and the closer we are to the poles, the less varied is animal and plant life, until it completely disappears.

As it was mentioned above, butterflies depend on plants, so there

is to be familiar with plant life in order to be able to learn about butterflies. A quick look at the vegetation in an area, can tell us a lot about the butterflies which can be found there, and the opposite. A butterfly guide through some surroundings can help us find out about the plants which exist there. However, the fact that a foodplant can be found in an area, does not mean the butterfly species which on them live there as well. There are other factors which determine whether some butterflies live in an area, such as altitude, latitude and climate.



Butterflies play an important role wherever they live. As they eat plants, butterflies are at the beginning of the food chain, which means that caterpillars are rather significant in making plant life more varied and controlling dominant species. Adult butterflies are important for plants pollination.

Throughout all their life, during their caterpillar and adult phase, butterflies are one of the most important parts of the food chain.

Caterpillars serve as a food above all to birds, micro-mammals and other invertebrates, like beetles and wasps. Some wasp and fly species behave as parasites and lay eggs inside

Mallow Skipper caterpillar (up) and Cabbage White (down) with Braconidae parasitoid wasps.



Prey butterflies: The Southern Blue is preyed on by *Orthetrum trinacria* dragonfly; the Monarch is hunted by the mantis, *Phodromantis viridis*; the Spanish gatekeeper is preyed on by jumping spiders and the (Dark) Clouded Yellow by predatory flies.





of a caterpillar. Its larvae feed on butterfly caterpillars, by eating those tissues which have no vital functions so its host can continue eating and growing as well, and it even achieves the stage of a chrysalis. In the end, caterpillars die when pupae come out of its parasites, or adult parasites emerge from its chrysalis if it achieves to develop.

Adult butterflies are source of food for many animals. Among them we can find birds, such as a beet-eater that lives on flying insects, and varied invertebrates like spiders, predatory flies, mantidae and dragonflies.

In both of the above stages, some species fight against their predators

in different and rather intelligent ways. Plenty of caterpillars disguise, while others do exactly the opposite and show shiny colours and patterns. In the case of the Monarch, its colours warn predators about it being poisonous as it feeds on poisonous plants. The same happens with this species adult butterfly, which is also toxic, but mantidae and spiders can manage to feed on it. The Old World Swallowtail caterpillar and the rest of the family Papilionidae, take use of different strategy to escape from their predators. They spread a pungent odour through retractable tentacles, an organ called *osmeterium*, on their head. As for the adult butterfly, can



Different Defence Techniques From left to right and downwards: The Old World Swallowtail caterpillar showing its *osmeterium*. *Photo: Rafael Obregón Romero*. Rock Grayling imitating tree bark; Nettle-tree Butterfly, which looks like a dry leaf; Great Banded Grayling is threatening with its intimidating eye; Lang's Short-tailed Blue's fake eyes and antennae.



hide thanks to varied colours and designs on it. Among these butterflies there are some species which stand out from the rest, such as the Golden Skipper, which disguise in a way it cannot be seen in dry grass. The Rock Grayling and the Graying hide on the tree trunk as they look like a piece of bark. There are also the Nettle-tree Butterfly, which looks like a dry leaf and The Purple Hairstreak Butterfly, which is well concealed among holm oak leaves. Another way to hide is to look like something else, which is the case of the Nymphalidae family. The butterflies that belong to this family have a kind of 'frightening eye' close to the apex of the forewings, which looks threatening. Some Lycaenidae try to cheat on their predators thanks to the spots which look like eyes and tails close to the apex. They move their wings up and down in order to deceive their predators, which attack the part of their body which is not vital.

Nevertheless, butterflies are not only surrounded by danger. Some species, such as those which belong to the Lycaenidae family, are helped

by ants. Myrmecophily is the term applied to a symbiosis between ants and caterpillars, during which the former looks after the latter from its birth to the moment it turns into an adult butterfly. Ants make sure they protect caterpillars from predators and parasitoids, help them find food-plants, and even take them to the plant or to the ants' nest, where some species hibernate, pupate or turn into an adult butterflies. Caterpillars benefit a lot from ants, but what do ants get? The answer is a drop of sweet water from time to time. Due to their vegetarian diet, caterpillars must get rid of sugar which they cannot absorb through Newcomer gland on its back part. This juice is the reason for this interspecies association. Nevertheless, there situations when ants are deceived by a low number of butterfly species (from the genus *Maculinea* or *Phengaris*), and they get nothing in return for helping them. Caterpillars can emit sounds and pheromone, which are similar to those produced by a queen ant, in order to control the colonies and even feed on ants larvae.

Lycaenidae caterpillars helped by ants. Photo: Rafael Obregón Romero.





Butteries and Humans

As we it was previously explained, diurnal butterflies may confront many hazardous situations. We could also see that they are also prepared to successfully manage those situations. Actually, butterflies and their attackers have evolved and still go through constant but balanced battles. However, their greatest enemy seem to be, no one else, but humans.

There are many civilizations that lived in the area that belongs to the Province of Málaga in the last two thousand years. Each of them left their trail in the landscape and vegetation. Since the Roman rule, the environment has been transformed according to humans' needs. In the last two hundred years, trees have been cut for the sake of coal, iron and steel industry or for

creating pasture. There is also to add the effects of forest fires, rivers channelling, new residential areas, big infrastructures, polluting, the use of herbicides and insecticides, etc. All these actions caused the decline of butterfly population and led to the extinction of some local species or their migrations.

Luckily, there are still places in this province where butterfly species are at least varied if not numerous. The Tejeda and Almijara Mountains, The Arco Calizo Central, and some other mountain ranges in the north of the province, as well as the Serranía de Ronda, Alcornocales, the Bermeja, Blanca, Alpujata and Mijas Mountains, are rich in lepidopterans, which used to live all over the province.

The gear used for studying butterflies

There are not many things you need to observe and study diurnal butterflies. It is enough to be willing to go out to watch them. Nevertheless, you should ask for a better experience. Binoculars are rather helpful for observing butterflies when they stop to rest or eat. Lens of magnification from x8 to x10 are recommended, as well as the observation from as short

distance as possible. Another useful gear is a digital camera (the greatest the optical zoom the better), which can capture macro so you could be only few centimetres away from the insect. For more detailed studies, butterflies are taken to laboratories to be closely observed. It is necessary to be authorized by the Andalusian Environmental Department for that



purpose. The capture of butterflies is forbidden no matter it is brief and butterflies are observed and released, or permanent (until their death) if you do not have required licence for such actions. The gear which is used for butterfly hunting is a butterfly net. It consists of a handle, telescopic if possible, a rim and netting made of a fine and soft fabric which will not

hurt butterflies when they are caught. Once the butterfly is captured it can be watched in different ways. It can be observed inside of the net while it is kept still or you can carefully take it by its thorax, avoiding the wings. Special bottles for insect observation can be bought, but the drawback is that butterflies beat against its walls and can get hurt.

Where and when can you see butterflies?

Butterflies can be seen everywhere throughout the year. However, you should mind certain information in order to save time and effort.

As mentioned above, butterflies are closely attached to their foodplants, so their presence depend on whether they can supply themselves with food or not. Another important factor is the weather. Butterflies need warm weather to make their circulatory system work, so they do not fly around when it is cloudy, rainy or windy. These conditions make the search more difficult. There is to choose sunny days, ideally, from the end of winter to the beginning of summer.

Butterflies are more probable to be found in places with lush vegetation, such as forests and scrubland, high mountains, rivers and streams or similar areas which are humid in summer. In dense forests, there is

to look for bright areas as butterflies cannot be seen in shady dark zones. They are more probable to be still in the morning when you can take pictures of them. The hotter it is the more active they are, as they stop only to drink on flowers, so it becomes much more difficult to take photos, of them although this is the best occasion for spotting and counting species.

When you see a butterfly which is standing still, you should approach it slowly and gently, avoiding fast and sudden movements because, even though they cannot see well, they can sense movement and they fly away from any possible danger.

If you are looking for specific species, there is to study them before the observation and find out more about them, as well as their foodplants, habitats, when they fly, how they are distributed, etc.



Diurnal Butterflies in the Province of Málaga

Spain is the third best country in Europe in the case of butterfly species diversity due to its location and geological history. Some African species can be found due to its proximity. At the western border, you can as well find European and Eurasian species. Some ancient species from the last ice-age can be seen in high mountains. Many of these species are evolving into new species because of living isolated and being endemic to a limited area.

As for Málaga, a guide 'Atlas de distribución de las mariposas diurnas de la provincia de Málaga' [The Atlas of Diurnal Butterfly Distribution in the Province of Málaga], which was published at the end of 2015, includes 110 different species. This number contains a high percentage of Andalusian (75%) and Spanish (48%) butterflies. We are talking about rather

great diversity, considering that this is the smallest Andalusian province, which is surrounded by 2000-metres tall mountains in the south of the Iberian Peninsula close to the sea shore, so some Eurasian species that cannot bear continental climate do not fit there.

Málaga has several endemic species, as well as those which can only be found on this peninsula, such as the Panoptes Blue, the Mother-of-pearl Blue and the Spanish Argus. *Iberian and Maghrebi endemic species of Lorquin's Blue and Amanda's Blue* The Andalusian Anomalous Blue is another endemic gem that can be exclusively seen in the Baetic System in Málaga, where it was discovered and became important for science, some other Andalusian cities, such as Granada, Almería and Jaén, as well as in Murcia and Albacete.

The Andalusian Anomalous Blue, endemic species which can solely be found in Málaga, Granada, Almería, Jaén, Albacete and Murcia.





The Great Málaga Path and its Butterflies

This circular path, which goes along rather great part of the Province of Málaga, is long-distance path marked with GR. Its stages embrace diverse kinds of landscape, which, of course, shelter many different species of butterflies.

The butterflies that can be seen along the Great Málaga Path (GMP) have not been studied in detail yet, so there is to wait for a catalogue which includes more species and their range that this book.

Up to the present, 84 from 110 species which live in Málaga can be spotted along the GMP: Twenty-one of

the rest of them are probably near the path as well, although they have not been found yet, but they have been seen nearby in similar habitats. They are more likely to be found along the stages which go through the mountains or forests. Remaining five species can hardly be living close to the path as they look for ecological conditions which do not exist around this path.

The following chart includes the list of the above species and the likelihood of their existence along of the GMP: P - present, pp - probably present; np - not present.

Common Name	Latin Name	Status
Spanish Festoon	<i>Zerynthia rumina</i> (Linnaeus, 1758)	P
Old World Swallowtail / Common Yellow Swallowtail	<i>Papilio machaon</i> (Linnaeus, 1758)	P
Scarce Swallowtail	<i>Iphiclides podalirius</i> (Linnaeus, 1758)	P
Dingy Skipper	<i>Erynnis tages</i> (Linnaeus, 1758)	pp
Mallow Skipper	<i>Carcharodus alceae</i> (Esper, 1780)	P
False Mallow Skipper	<i>Carcharodus tripolinus</i> (Verity, 1925)	pp
Marbled Skipper	<i>Carcharodus lavatherae</i> (Esper, 1783)	pp
Southern Marbled Skipper	<i>Carcharodus baeticus</i> (Rambur, 1839)	P
Tufted Skipper	<i>Carcharodus flocciferus</i> (Zeller, 1847)	pp
Red-underwing Skipper	<i>Spialia sertorius</i> (Hoffmansegg, 1804)	P
Polvillo dorado (Spanish common name)	<i>Sloperia proto</i> (Ochsenheimer, 1808)	P
Rosy Grizzled Skipper	<i>Pyrgus onopordi</i> (Rambur, 1839)	P
Essex Skipper	<i>Thymelicus sylvestris</i> (Ochsenheimer, 1808)	P
Small Skipper	<i>Thymelicus lineola</i> (Poda, 1761)	P
Lulworth Skipper	<i>Thymelicus acteon</i> (Rottemburg, 1775)	P



Common Name	Latin Name	Status
Silver-spotted Skipper,	<i>Hesperia comma</i> (Linnaeus, 1758)	pp
Large Skipper	<i>Ochlodes sylvanus</i> (Esper, 1777)	P
Dingy Swift / Mediterranean Skipper	<i>Gegenes nostradamus</i> (Fabricius, 1793)	P
Borbo Skipper	<i>Borbo borbonica</i> (Boisduval, 1833)	pp
Wood White	<i>Leptidea sinapis</i> (Linnaeus, 1758)	P
Brimstone	<i>Gonepteryx rhamni</i> (Linnaeus, 1758)	P
Cleopatra	<i>Gonepteryx cleopatra</i> (Linnaeus, 1767)	P
Berger's Clouded Yellow	<i>Colias alfajariensis</i> Ribbe, 1905	pp
Dark Clouded Yellow / Common Clouded Yellow	<i>Colias crocea</i> (Geoffroy, 1785)	P
Orange-tip	<i>Anthocharis cardamines</i> (Linnaeus, 1758)	pp
Provence Orange Tip	<i>Anthocharis euphenoides</i> (Staudinger, 1869)	P
Sooty Orange Tip	<i>Zegris eupheme</i> (Esper, 1804)	pp
Portuguese Dappled White	<i>Euchloe tagis</i> (Hübner, 1804)	P
Western Dappled White	<i>Euchloe crameri</i> (Butler, 1869)	P
Green-striped White	<i>Euchloe belemia</i> (Esper, 1800)	P
Black-veined White	<i>Aporia crataegi</i> (Linnaeus, 1758)	P
Large White / Cabbage Butterfly / Cabbage White	<i>Pieris brassicae</i> (Linnaeus, 1758)	P
Small White / Small Cabbage White	<i>Pieris rapae</i> (Linnaeus, 1758)	P
Southern Small White.	<i>Pieris mannii</i> (Mayer, 1851)	P
Green-veined White	<i>Pieris napi</i> (Linnaeus, 1758)	pp
Bath White	<i>Pontia daplidice</i> (Linnaeus, 1758)	P
Desert Orange Tip / Small Orange Tip	<i>Colotis evagore</i> (Klug, 1829)	P
Small Copper / Common Copper	<i>Lycaena phlaeas</i> (Linnaeus, 1760)	P
Purple-shot Copper	<i>Lycaena alciphron</i> (Rottemburg, 1775)	P
Purple Hairstreak	<i>Favonius quercus</i> (Linnaeus, 1758)	P
Spanish Purple Hairstreak,	<i>Laeosopis roboris</i> (Esper, 1793)	pp
Provence Hairstreak / Cardenillo	<i>Tomares ballus</i> (Fabricius, 1787)	P
Green Hairstreak	<i>Callophrys rubi</i> (Linnaeus, 1758)	P
Chapman's Green Hairstreak	<i>Callophrys avis</i> (Chapman, 1909)	P
Blue Spot Hairstreak	<i>Satyrium spini</i> (Fabricius, 1787)	P
False Ilex Hairstreak	<i>Satyrium esculi</i> (Hübner, 1804)	P
Pea Blue / Long-tailed Blue	<i>Lampides boeticus</i> (Linnaeus, 1767)	P



Common Name	Latin Name	Status
Geranium Bronze	<i>Cacyreus marshalli</i> (Butler, 1898)	P
Lang's Short-tailed Blue / Common Zebra Blue	<i>Leptotes pirithous</i> (Linnaeus, 1767)	P
Common Tiger Blue	<i>Tarucus theophrastus</i> (Fabricius, 1793)	pp
Dark Grass Blue / African Grass Blue,	<i>Zizeeria knysna</i> (Trimen, 1862)	P
Lorquin's Blue	<i>Cupido lorquini</i> (Herrich-Schäffer, 1850)	P
The Holly Blue	<i>Celastrina argiolus</i> (Linnaeus, 1758)	P
Panoptes Blue	<i>Scolitantides panoptes</i> (Hübner, 1813)	P
False Baton Blue	<i>Scolitantides abencerragus</i> (Pierret, 1837)	P
Green Underside Blue	<i>Glaucopsyche alexis</i> (Poda, 1761)	pp
Black Eyed Blue	<i>Glaucopsyche melanops</i> (Boisduval, 1828)	P
Southern Blue	<i>Polyommatus celina</i> (Austaut, 1879)	P
Mother-of-pearl Blue	<i>Polyommatus nivescens</i> (Keferstein, 1851)	P
Chapman's Blue	<i>Polyommatus thersites</i> (Cantener, 1835)	P
Andalusian Anomalous Blue	<i>Polyommatus violetae</i> (Gómez Butillo, Expósito & Martínez 1979)	P
Escher's Blue	<i>Polyommatus escheri</i> (Hübner, 1823)	P
Spanish Chalk-hill Blue	<i>Polyommatus albicans</i> (Gerhard, 1851)	P
Adonis Blue	<i>Polyommatus bellargus</i> (Rottemburg, 1775)	P
Spanish Argus	<i>Aricia morronensis</i> (Ribbe 1910)	np
Southern Brown Argus	<i>Aricia cramera</i> (Eschscholtz, 1821)	P
Mountain Argus	<i>Aricia montensis</i> (Verity, 1928)	pp
Geranium Argus	<i>Eumedonia eumedon</i> (Esper, 1780)	np
Silver-studded Blue	<i>Plebejus argus</i> (Linnaeus, 1758)	pp
Nettle Tree Butterfly	<i>Libythea celtis</i> (Laicharting, 1782)	P
Monarch	<i>Danaus plexippus</i> (Linnaeus, 1758)	P
Plain Tiger	<i>Danaus chrysippus</i> (Linnaeus, 1758)	pp
Large Wall Brown	<i>Lasiommata maera</i> (Linnaeus, 1758)	P
Wall Brown	<i>Lasiommata megera</i> (Linnaeus, 1767)	P
Speckled Wood	<i>Pararge aegeria</i> (Linnaeus, 1758)	P
Dusky Heath	<i>Coenonympha dorus</i> (Esper, 1782)	P
Small Heath	<i>Coenonympha pamphilus</i> (Linnaeus, 1758)	P
Meadow Brown	<i>Maniola jurtina</i> (Linnaeus, 1758)	P



Common Name	Latin Name	Status
Gatekeeper /Hedge Brown	<i>Pyronia tithonus</i> (Linnaeus, 1771)	P
Southern Gatekeeper	<i>Pyronia cecilia</i> (Vallantin, 1894)	P
Spanish Gatekeeper	<i>Pyronia bathseba</i> (Fabricius, 1793)	P
Dusky Meadow Brown	<i>Hyponephele lycaon</i> (Kühn, 1774)	P
Oriental Meadow Brown	<i>Hyponephele lupinus</i> (Costa, 1836)	pp
Iberian Marbled White	<i>Melanargia lachesis</i> (Hübner, 1790)	P
Western Marbled White	<i>Melanargia occitanica</i> (Esper, 1793)	P
Spanish Marbled White	<i>Melanargia ines</i> (Hoffmannsegg, 1804)	P
Rock Grayling	<i>Hipparchia alcyone</i> (Linnaeus, 1764)	P
Graying	<i>Hipparchia semele</i> (Linnaeus, 1758)	P
Tree Grayling	<i>Hipparchia statilinus</i> (Hufnagel, 1766)	P
Striped Grayling	<i>Hipparchia fidia</i> (Linnaeus, 1767)	P
Hermit	<i>Chazara briseis</i> (Linnaeus, 1764)	P
Black Satyr	<i>Satyrus actaea</i> (Esper, 1781)	np
Great Banded Grayling	<i>Kanetisa circe</i> (Fabricius, 1775)	np
Two-tailed Pasha	<i>Charaxes jasius</i> (Linnaeus, 1767)	P
Red Admiral	<i>Vanessa atalanta</i> (Linnaeus, 1758)	P
Painted Lady	<i>Vanessa cardui</i> (Linnaeus, 1758)	P
Large Tortoiseshell / Blackleg Tortoiseshell	<i>Nymphalis polychloros</i> (Linnaeus, 1758)	P
Small Tortoiseshell	<i>Aglais urticae</i> (Linnaeus, 1758)	pp
Comma	<i>Polygonia c- album</i> (Linnaeus, 1758)	P
Marsh Fritillary	<i>Euphydryas aurinia</i> (Rottemburg, 1775)	P
Dientes gualdos (common name in Spanish)	<i>Euphydryas desfontainii</i> (Godart, 1819)	P
Spotted Fritillary	<i>Melitaea didyma</i> (Esper, 1778)	pp
Knapweed Fritillary	<i>Melitaea phoebe</i> (Goeze, 1779)	P
Aetherie Fritillary	<i>Melitaea aetherie</i> (Hübner, 1826)	pp
Meadow Fritillary	<i>Melitaea parthenoides</i> (Keferstein, 1851)	np
Provençal Fritillary	<i>Melitaea deione</i> (Geyer, 1832)	P
Queen of Spain Fritillary	<i>Issoria lathonia</i> (Linnaeus, 1758)	P
Cardial	<i>Argynnis pandora</i> (Denis & Schiffermüller, 1775)	P
Niobe Fritillary	<i>Argynnis niobe</i> (Linnaeus, 1758)	P
High Brown Fritillary	<i>Argynnis adippe</i> (Denis & Schiffermüller, 1775)	pp





Descriptive Catalogue



Queen of Spain Fritillary





Identification guide to the diurnal butterflies along the Great Málaga Path

Butterfly and moth identification is more complex than simple observation and visual comparison between butterflies and their photos in the guide. There is to learn about the period when they can be seen, about their habitat, altitude and distribution. The things become more complicated when a butterfly which is being observed is isolated or the key details for its identification cannot be seen. This is why all the

features and the rest of the conditions for observation must match those presented in this guide in order to confirm the species' name. Nevertheless, there might be cases which overstep the line, as everything is possible in nature. In order to clear up doubts about species from this guide, or any other observed butterfly which photo has been taken, write to the following email address: conocenaturaeco@gmail.com.

Every species file card has several sections, which give detailed information about the butterfly in question, such as

- **Its common and scientific name**, the name of the author who first mentioned the species in a scientific publication as well as the year when it was done..
- **Description**. The main features of the butterfly when it closes and opens its wings.
- **Key for Visual Identification**. Places where species can be found, as well as what they have to look like are pointed out by short descriptions and photos.
- **Similar Species**. Main differences that exist between similar species are presented together with their photos.
- **Biology and Habitat**. In this section, the information about the place, foodplants, altitude and any other data related to the butterfly's habitat is summed up. Flight times are also explained. The best time for watching is marked with striking colours, while dim colours are used for periods when the probability to see the butterfly is lower. Rare, scarce or rather unknown species are shown in bright colours.
- **Distribution along the Great Málaga Path**. In this section you can see where a particular species of butterflies can be found along the path, or where it might appear even though it has not been seen yet. There is also data related to other conditions of the species, such as whether it is endemic and at what level, if it is endangered or protected by the current law.



Spanish Festoon

Zerynthia rumina (Linnaeus, 1758)

DESCRIPTION

Wingspan: from 4 to 5 cm. Its flying pattern is erratic. They normally fly close to the ground and above thickets. **Open wings:** With yellow, black and some red spots. The latter ones can be rather dim and they sometimes seem orange. Some of these butterflies' colour is between yellow and orange (*canteneri* form). At the outer margin of each wing, there are black wavy cuts with white endings. **Closed wings:** the appearance is similar to the one described above, but the prevailing colour is white with yellow and small black spots. The outer margin of hindwings is wavy, coloured in white, black and red and yellow.

KEY FOR VISUAL IDENTIFICATION

Big white, red spots. Smaller black spots. Mottled with yellow



Clearly marked wavy margins, coloured in white, black and red and yellow



Black, yellow and some red spots

Black wavy cuts with white endings

SIMILAR SPECIES

Old World Swallowtail: It is bigger, without red spots, has two tails on the hindwings, and it is stronger at flying. **Scarce Swallowtail:** It is also bigger and flies more strongly. It has black wedge-formed spots with two tails on the hindwings.



Old World Swallowtail (left) and Scarce Swallowtail (right)

BIOLOGY AND HABITAT

This species can be found throughout the year. Two generations fly almost all year long, above all at the end of winter and spring. It can be seen on sunny days in winter.

Its caterpillars mostly live in forest and ticket, where they feed on the Andalusian Dutchman's Pipe or Pipe Vine (*Aristolochia baetica*), a poisonous perennial vine.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is possible to find at any part of the route if there is a foodplant it feeds on. However, it is difficult to be spotted along 1st, 30th and 35th stage of the path as these stages go through towns or they are were highly adapted. In the northern part of the province, in Archidona, Antequera and Campillos, where farming is rather spread out, the species gets closer to rivers, and other places with local kind of plants which it feeds on.





Old World Swallowtail

Common Yellow Swallowtail

Papilio machaon (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 6 to 8.5 cm. These butterflies fly powerfully and glide, so they can look like birds. **Open wings:** They have big yellow-coloured spots rimmed with black lines. There are black stripes at the back of the wings, as well as half moons close to the margins, and blue spots on hindwings. These also have tails, called 'swallow's tail', and red spots on each apex. **Closed wings:** The shapes are similar to the previous ones, but with more yellow colour on the black spots, so they seem worn out.

KEY FOR VISUAL IDENTIFICATION

Big yellow-coloured spots rimmed with black lines



Black spots, sometimes sprinkled with yellow.

Yellow spots

Black stripe with blue spots

Reddish spot

A tail, called 'swallow's tail'



SIMILAR SPECIES

Spanish Festoon: It is small and has no 'swallow's tail'. **Scarce Swallowtail:** it is slightly smaller, and has black wedge-shaped spots and yellow colours on it.



Arlequín



Chupaleche

Spanish Festoon (left) and Scarce Swallowtail (right)

BIOLOGY AND HABITAT

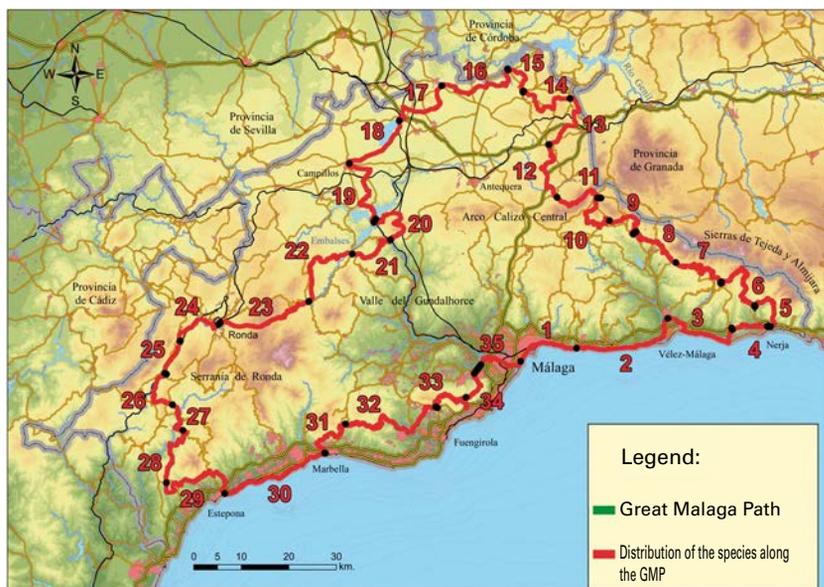
It has three generations that fly throughout the year: first two in spring and at the beginning of summer, and the third one in September and October. First two are more numerous, and the one that flies in October are present in smaller numbers as they depend on autumn rain.

It tends to spread over a big territory, so it can be found in all kinds of habitats, included urban areas, such as parks and gardens. It exhibits *hilltopping*, a behavioural activity which consists of climbing mountain tops, where a butterfly fights other butterflies of the same or different species for territory. While caterpillar, this species mainly feed on fennel (*Phoeniculum vulgare*), as well as on wild carrot (*Daucus carota*) and Rock Samphire (*Chritum maritimum*). Adult butterflies drink wild and garden plants nectar.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found at any part of the Great Málaga Path, as it spreads easily, although those butterflies which live in urban areas are less common and more difficult to be seen.





Scarce Swallowtail

Iphiclides podalirius (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 6 to 8 cm. It flies strongly so it might seem like a bird. **Open wings:** Forewings are in the shape of a triangle, with big black wedge-shaped stripes on light yellow background. Hindwings are wavy at the margins, with a black stripe and blue spots in the shape of half moons. They also have two 'swallow's tails'. **Closed wings:** The shapes are similar to the previous ones, but with fewer black spots, so they seem a bit worn out.

KEY FOR VISUAL IDENTIFICATION



Black stripe with blue spots

Two 'swallow's tails'

Similar patterns, with less amount of black



SIMILAR SPECIES

Spanish Festoon: It is smaller and has no 'swallow's tail'. The yellow colours on it are more striking and it has red spots. **Old World Swallowtail:** It is little bigger, without red spots, and its black spots are not wedge-shaped.



Spanish Festoon



Old World Swallowtail

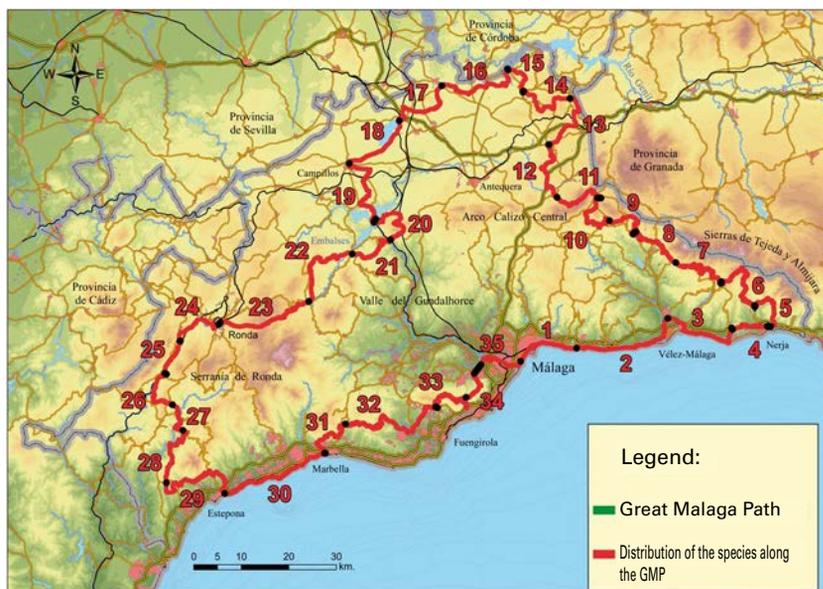
BIOLOGY AND HABITAT

These butterflies fly from the end of winter to the beginning of autumn, and counts on two generations, out of which the second one is bigger and it appears in July. They spread easily, and can be found in all kinds of habitats, included urban areas, where they drink nectar on garden plants. Nevertheless, the species prefers well-preserved forests, wide thicket areas and abandoned almond trees, as its caterpillars feed on almond trees (*Prunus dulcis*), and other wild and domesticated varieties of fruit trees that belong to Rosaceae family (*Prunus*, *Pyrus* y *Crataegus*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be found at any part of the Great Málaga Path, as it tends to spread easily. It is more difficult to be found in urban and northern areas, when it gets close to rivers, streams or almond trees.





Dingy Skipper

Erynnis tages (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.5 to 3 cm. Its flying pattern is erratic and normally at ground level. **Open wings:** Its forewings are brown with dark drawings in the shape of a saw on each wing and white scales around them. The hindwings are brown without any drawings on them. There are small white spots on their margins. **Closed wings:** These are lighter brown colour and have small white spots on the margins.

KEY FOR VISUAL IDENTIFICATION

Dark drawing (sometimes invisible) in the shape of a saw and white scales around it



Small white spots on the margin

Plain hindwing

Lighter brown



Small white spots on the margin



SIMILAR SPECIES

Its size, colours and drawings on the wings makes it difficult to be confused with other butterflies.

BIOLOGY AND HABITAT

This species goes through one generation a year that flies at the end of May and June, although we know little about them, considering they are rare in Málaga and appear in limited number of places. Dingy Skippers live in well-preserved mountain areas, at an altitude between 900 and 1300 m, on grassland, scrubland and in forests. Their caterpillars feed on leguminous plants, such as *Lotus*, *Hippocrepis*, *Coronilla* and *Anthyllis*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This butterfly species is one of the rarest examples of HesperIIDae in the province, and it has not been found on the Great Málaga Path, but it might have its colonies at The Arco Calizo Central (11th and 20th stage) and along the Serranía de Ronda (23rd stage).





Mallow Skipper

Carcharodus alceae (Esper, 1780)

DESCRIPTION

Wingspan: From 2 to 3 cm. **Open wings:** These butterflies forewings are dark brown with some grey and chestnut colour shades, while the hindwings are entirely dark brown with two kinds of spot patterns which are rather dull and unclear. **Closed wings:** Both of the wings are little lighter brown than on the inside. The margins with *fimbriae* are white and brown like a chess board, with some white spots on the hindwings, which are not covered in white veins.

KEY FOR VISUAL IDENTIFICATION

Three aligned well-marked square white spots



A series of vague spots

Chestnut colour

Lighter brown than on the inside



Checked margin

Vaguely marked veins

SIMILAR SPECIES

Mallow Skipper (*Carcharodus tripolinus*, Verity, 1925), is identical, so it is necessary to examine its male sex organ in order to identify the species. **Marbled Skipper**: When it opens wings, there are series of white striking spots on each wing, while the closed hindwings are rather white. ***Carcharodus baeticus* (Rambur, 1840)**: When their wings are open, these butterflies are grey and reddish, and sometimes they have white spots which are more prominent on the hindwings. White veins can be observed when their wings are closed. **Tufted Skipper or Tufted Marbled Skipper** (*Charcaharodus flocciferus*, Zeller, 1847): When these butterflies' wings are open, similarly to the previous species, there are series of white spots which stand out on the hindwings. When their wings are closed, white spots are more prominent than in the case of other species.



BIOLOGY AND HABITAT

These butterflies fly throughout the year, taking several generations, some of them at the same time, to do so. They are particularly common at the beginning of autumn, if the summer was rainy. They can be found in varied habitats,

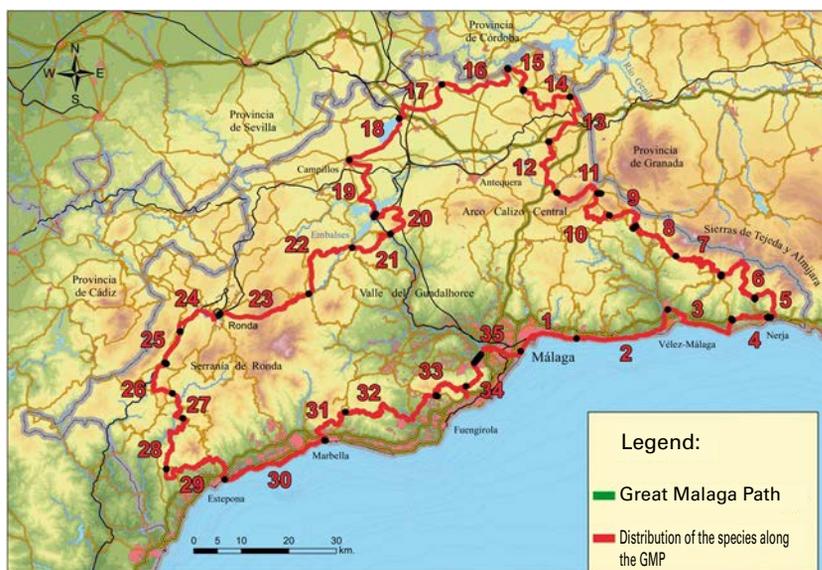
Carcharodus baeticus

above all, in those places which have been adapted, such as parks and gardens, where their mallow foodplants (*Malva* or *Lavathera* genus) grow.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies can be found all along the Great Málaga path, though there are not many tons in which they can be seen nor they are present in big numbers. This species was seen in Manilva and Vélez-Málaga, but the exact locations where they come are not known, nor do we know where precisely they can be seen along the Great Path.





Marbled Skipper

Carcharodus lavatherae (Esper, 1783)

DESCRIPTION

Wingspan: From 2.5 to 3.4 cm. **Open wings:** Forewings are brown with large white zones, and three squares, one spot in the centre and outer margin which stand out. There are series of spots which are bigger than in the case of other Skippers on the hindwings.

Closed wings: They are light creamy white with big white spots, which are sometimes difficult to be noticed.

KEY FOR VISUAL IDENTIFICATION



Te same kind of spots as above



SIMILAR SPECIES

Mallow Skipper: It has white squared spots which are a bit smaller, while on the open wings, we can see white instead of chestnut colour. ***Carcharodus baeticus* (Rambur, 1840):** When their wings are open, these butterflies are grey and reddish, and sometimes they have white spots which are more prominent on the hindwings. White veins can be observed when their wings are closed. **Tufted Skipper or Tufted Marbled Skipper:** When these butterflies' wings are open, there are series of white spots which stand out on the hindwings. When their wings are closed, it is darker and white spots are more prominent.



Carcharodus baeticus

BIOLOGY AND HABITAT

This species takes one generation to fly in June and July, but we know little about its biology as these butterflies are rather rare and located in Málaga.

It lives in sparse oak and Spanish fir forests where thickets are scattered around. These caterpillars feed on labiates which belong to *Stachys* and *Sideritis* genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species has not been found along the Great Path, but it might exist along some of the stages at the Arco Calizo Central, above all on stage 11, and in the Serranía de Ronda, on stage 23.





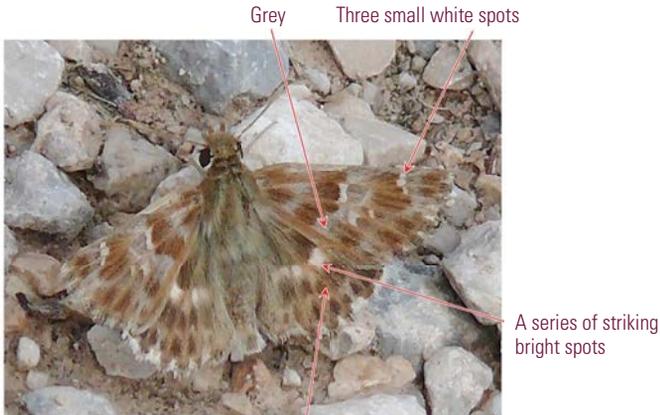
Southern Marbled Skipper

Carcharodus baeticus (Rambur, 1839)

DESCRIPTION

Wingspan: From 2.5 to 3 cm. **Open wings:** These butterflies have light brown forewings with large grey zones, and a bit darker hindwings with a series of striking bright spots. On each pair of wings, there the veins are highlighted. **Closed wings:** They are creamy white with clearly visible and heavily marked veins.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Mallow Skipper: Having their wings opened or closed, they are not as grey as Southern Marbled Skippers, and the veins are not highlighted. **Marbled Skipper:** When it opens wings, there are series of white striking spots on each wing, while the veins are not clearly visible on the closed hindwings. **Tufted Skipper or Tufted Marbled Skipper:** When these butterflies' wings are closed, their white spots are bigger and veins are less visible.



Marbled Skipper

BIOLOGY AND HABITAT

This species takes several generations to fly from April to July. They are more numerous in June, and less numerous at the end of summer and in autumn.

They can be seen above all in sparse forests with scattered thickets, in lower or higher areas. These caterpillars feed on labiates which belong to *Ballota* and *Marrubium* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This specie's butterflies can be found along the entire Great Path, except in areas that are at really low altitude or close to the coast. It is more probable to be seen in the north of the province, where local vegetation is present or close to the livestock-farming zones and farms.





Tufted Skipper

Carcharodus flocciferus (Zeller, 1847)

DESCRIPTION

Wingspan: From 3.2 to 3.5 cm. **Open wings:** There is a bright spot under the apex, and a series of striking bright spots on hind wings. **Closed wings:** They have the same spot as on the open frontwings, and the similar one on the hindwings. There are some big white spots as well.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Mallow Skipper: With open wings, they have no white spots on the hindwings, while their closed wings are coloured chestnut. **Marbled Skipper:** When they open wings, there are two series of white striking spots on hindwings. **Carcharodus baeticus:** Smaller white spots and clearly marked veins can be observed when their wings are closed.



Mallow Skipper

Piquitos castaña



Carcharodus baeticus

Piquitos clara



Piquitos

Marbled Skipper

BIOLOGY AND HABITAT

This specie's butterflies take two generations a year to fly in June and July. Their biology is not known enough as they are rare and can be found in limited number of places. They mainly live in well-preserved forests, at an altitude between 60 and 1100 m, on grassland or in sparse oak and pine forests. These caterpillars feed on labiates which belong to *Stachys* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This specie's butterflies take two generations a year to fly in June and July. Their biology is not known enough as they are rare and can be found in limited number of places. They mainly live in well-preserved forests, at an altitude between 60 and 1100 m, on grassland or in sparse oak and pine forests. These caterpillars feed on labiates which belong to *Stachys* genus.



Legend:

- Great Malaga Path
- Distribution of the species along the GMP



Red-underwing Skipper

Spialia sertorius (Hoffmannsegg, 1804)

DESCRIPTION

Wingspan: From 2 to 2.5 cm. This species flight pattern is erratic and they are rather territorial. They seem to be jumping every time they take off from the ground, where they commonly rest. **Open wings:** There are four aligned spots close to the apex on the forewings with checked hairy margins and some inner small white spots. **Closed wings:** They are reddish or chestnut coloured. There are some distinctive white spots on hindwings, above all on margins and one in the centre with an outer angle.

KEY FOR VISUAL IDENTIFICATION

Four perfectly aligned spots



A series of small spots

Checked margins

Reddish or chestnut background

Large white spot



Margin with one big and other small white spots

A white spot with an outer angle.

SIMILAR SPECIES

***Sloperia proto*:** There are only three spots close to the front apex on their open wings, while some large white spots can be found in the central zone of the hindwings. Their closed wings are light brown or creamy white, without big spots on the hindwings margins and a central spot with an outer angle. **Rosy Grizzled Skipper:** There are four spots on the apex on the open wings. The last spot is close to the margin. In the centre of the closed wings, a spot with an inner angle can be seen.



Polvillo dorado

Sloperia proto



Ajedrezada bigornia

Rosy Grizzled Skipper

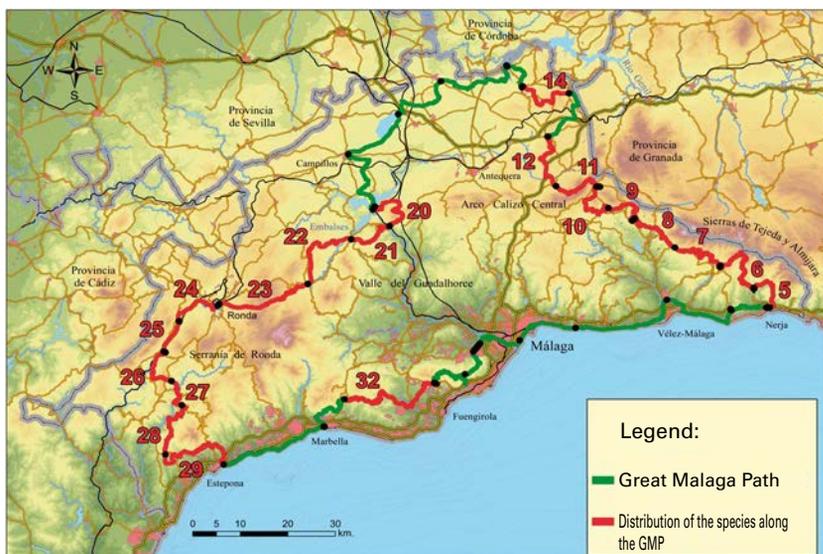
BIOLOGY AND HABITAT

Two generations can be seen in spring and summer, and most commonly in May and July. They can mostly be found in mountains forests and scrubland, and sometimes in open areas, close to rivers and streams. These caterpillars feed on Rosaceae plants that belong to *Sanguisorba* genus. Recently, another kind of Red-underwing Skipper (*Spialia rosae*), with the same appearance and different caterpillar's foodplant (Wild Rose, *Rosa spp.*), has been described. The populations of this new species were found in the Sierra Nevada, though they might exist in Málaga too. Therefore, if you observe any butterfly on or away from the GMP, which lays eggs on a rose plant, please inform this guide's author of this important event.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies above all exist on those stages which go through the mountain areas, such as the Serranía de Ronda and the Genal Valley. The species has not been seen along the GMP in the Sierra de Blanca in Ojén and Mijas (stages 31, 33 and 34), where it could be found in limited number of places, as well as on stage 14. It has not been spotted yet in the northern part of the province and on the coast.



Legend:

— Great Malaga Path

• Distribution of the species along the GMP



Polvillo Dorado (Spanish common name)

Sloperia proto (Ochsenheimer, 1808)

DESCRIPTION

Wingspan: From 2 to 3 cm. **Open wings:** There are three aligned spots close to the apex on the forewings, which have checked margins with *fimbriae*. The hindwings have spots in the centre of the wings. **Closed wings:** They are brown or creamy white; and the hindwings have no spots on the margins, but do have a distinctive central spot with an inner angle.

KEY FOR VISUAL IDENTIFICATION

Three perfectly aligned white spots



Bright spots

Checked margins

Brown or creamy white background



No white spots on the margin

No white spots on the margin

SIMILAR SPECIES

Red-underwing Skipper: There are four spots close to the front apex on their open wings. Closed wings are reddish or chestnut and some large spots can be found at the margins of the hindwings, as well as a spot with an outer angle in the middle of them. **Rosy Grizzled Skipper:** There are four spots on the apex on the open wings. The last spot is close to the margin. In the centre of the closed wings, a spot with an inner angle can be seen.



Sertorio

Red-underwing Skipper



Ajedrezada bigornia

Rosy Grizzled Skipper

BIOLOGY AND HABITAT

Only one generation can be seen from March to November and it takes a long time to emerge. They are most active in May, Jun and July. These butterflies live in all kinds of habitats with their foodplants such as the following labiates: *Phlomis purpurea*, *P. lychnitis*, *P. crinita* and *P. herba-venti*. These are frequently part of undergrowth, wide scrubland or they are isolated in places which were degraded by humans.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species can be found on most stages, except on those that entirely go through urban areas and get close to the beach (1st and 30th), as well as on the 35th. It is less common on the coast and in the north of the province.





Rosy Grizzled Skipper

Pyrgus onopordi (Rambur, 1839)

DESCRIPTION

Wingspan: From 2 to 2.8 cm. **Open wings:** There are four spots close to the apex on the forewings. The last one is close to the margin. As for the hindwings, they have vague spots in the centre. **Closed wings:** They are reddish or chestnut coloured. There are some small white spots on hindwings. The one on the margins is bigger and the one in the centre has an angle that points inside.

KEY FOR VISUAL IDENTIFICATION



Four spots close to the apex on the forewings, and the last one close to the margin

Vague light spots

Checked margins

Reddish or chestnut background



One big and other small white spots on the margin

White spots with the angle that points inside.

SIMILAR SPECIES

Red-underwing Skipper: There are four spots close to the front apex on their open wings. Closed wings are reddish or chestnut and a spot with an outer angle can be found in the centre. ***Sloperia proto*:** There are three spots close to the apex on their open wings. Their closed wings are light brown or creamy white, without big spots on the hindwings margins. Grizzled Skippers (*Pyrgus* genus) can be difficult to distinguish among them, above all between the Rosy Grizzled Skipper and the Oberthür's Grizzled Skipper (*Pyrgus armoricanus*, Oberthür, 1910), when it becomes necessary to examine masculine genitals. The Rosy Grizzled Skipper is the only one to be found in the Province of Málaga.



Sertorio



Polvillo dorado

Red-underwing Skipper

Sloperia proto

BIOLOGY AND HABITAT

It has two generations a year: one in spring and beginning of summer, and the second one at the end of the summer and beginning of autumn. The latter one is more numerous if the end of summer is rainy. This species is located in sparse forest and scrubland with bushes and grassland. Sometimes it can be found in not very steep zones, well-preserved spaces and some spots which were spoiled by human actions, such as surroundings of farmhouses, some of which are in ruins, river terraces and road or street ditches. These butterflies are close to their caterpillars' foodplants, which are mainly mallows (*Malva spp.*), but also the White Rock-rose (*Helianthemum apenninum*) and the Creeping Cinquefoil (*Potentilla reptans*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies are not common along the GMP, and they can only be found in the northern part of the province and western stages. Some samples might be seen along the majority of routes, except on urban stages.





Small Skipper

Thymelicus lineola (Ochsenheimer, 1808)

DESCRIPTION

Wingspan: From 2.2 to 3 cm. The most distinctive feature of this species are black antennae clubs that can be seen only when the butterfly rests and its wings are closed, or when you are facing them. **Open wings:** Each wing is gold-coloured. The male butterflies' forewings have a short black line (*androconia*). **Closed wings:** The hindwings are golden in the case of male butterflies, and golden with the green centre in the case of female butterflies.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Essex Skipper: When open, male butterflies have a long black line (*androconia*). The clubs of antennae are orange whether their wings are open or closed, although they might seem dark when the wings are open and the hind part of the antennae can be seen. There is to watch the front part of the antennae for a correct identification of species. **Lulworth Skipper:** This species can be confused with Small Skippers only when its wings are closed, so we can say that the orange antennae clubs are a distinctive feature in this case. Golden colour can be observed when forewings are shown.



Essex Skipper



Lulworth Skipper

BIOLOGY AND HABITAT

This species takes one generation a year to fly mainly in May. It flies sooner than Essex Skipper, so that the flight periods can help distinguish these two species, considering they can both live in the same place.

These butterflies live in wide grassland, above all in well-preserved sparse oak and pine forests, in mountains at an altitude from 590 to 1250 m. Their caterpillars feed on grasses that belong to different genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is not commonly seen in Málaga, and it has only been noticed along stage 11 of the GMP. It is likely to be found, although in small numbers and only certain spots, along other routes, above all those that go from Cómpeta to Villanueva de Tapia, on stage 20, and from Ardales to Benalauria.





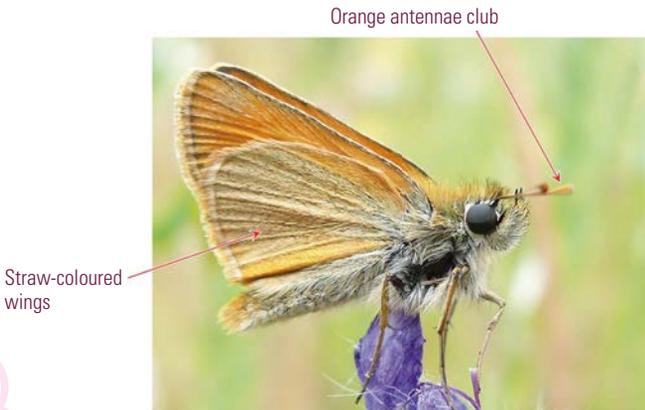
Essex Skipper

Thymelicus sylvestris (Poda, 1761)

DESCRIPTION

Wingspan: From 2.5 to 3 cm. These butterflies main feature are orange clubs on their antennae. In order to see them, you must face a butterfly or watch it when its wings are closed. **Open wings:** Each wing is gold-coloured. The male butterflies' forewings have a short black line (*androconia*). **Closed wings:** The hindwings are straw-coloured.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Small Skipper: When their wings are open, male butterflies have a bit shorter black line (*androconia*) than the above species. **Lulworth Skipper:** This species can be confused with Essex Skippers only when its wings are closed because its hindwings are a bit more orange. Golden colour can be observed when forewings are shown.



Small Skipper



Lulworth Skipper

BIOLOGY AND HABITAT

It mostly flies in June, and takes one generation a year to do so. The period of its flight can help us distinguish this species from the Small Skipper, as both species live in the same place but the latter flies earlier than the Essex Skipper.

They usually live in the mountains, grassland, well-preserved sparse forest and on scrubland. The species can be found at an altitude that ranges between 400 to 1800 m in the Province of Málaga. Their caterpillars feed on grasses that belong to different genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies can be seen in the mountain ranges, the Arco Calizo Central and the Serranía de Ronda. They are likely to be found in some other places as well, above all along the routes which go through the Tejada and Almijara Mountains, and maybe in the remote areas in the north of the province.





Lulworth Skipper

Thymelicus acteon (Rottemburg, 1775)

DESCRIPTION

Wingspan: From 2 to 2.8 cm. **Open wings:** Both of the wings are brown. The forewings have a series of golden spots which form an arch, and are much more obvious in the case of female than male butterflies. The latter have wings which are actually golden colour not brown and have a black line over them (*androconia*). **Closed wings:** The hindwings are orangey.

KEY FOR VISUAL IDENTIFICATION

FEMALE



Brown background

A series of golden spots which form an arch.

MALE



Thin black line (androconia)

Brown, almost golden colour, and vague spots.

Color anaranjado



SIMILAR SPECIES

Small Skipper: This species can be confused with the above one only when its wings are closed as the clubs on their antennae are black. **Essex Skipper:** It can be confused with Lulworth Skipper only when its wings are closed because the hindwings are straw-coloured. **Silver-spotted Skipper:** It is bigger and tougher. It can be confused with Lulworth Skipper only when its wings are open because there are fewer spots on them, which do not make an arch. **Large Skipper:** It is bigger and tougher. It can be confused with Lulworth Skipper only when its wings are open because there are fewer spots on them, which do not make an arch. Moreover, the black line (*androconia*) is larger, and not as brown as the one of the Lulworth Skipper in the case of both, male and female butterflies.



Dorada linea corta
Small Skipper



Dorada linea larga
Essex Skipper



Dorada manchas blancas
Silver-spotted Skipper



Dorada oña ancha
Large Skipper

BIOLOGY AND HABITAT

This species takes only one generation a year to fly from April to August, and most commonly in May and June. They live in all kinds of habitats with grass, from meadows, sparse forests and well-preserved scrubland in the mountains, to the places which were adapted by people close to the coast, such as abandoned quarries, road ditches, uncultivated land, borders of the farmland, and dry river and stream beds. Their caterpillars feed on grasses that belong to different genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The Lulworth Skipper is the most common of its genus in the Province of Málaga. It can be found on every stage of the GMP, although in limited number of places. There are fewer butterflies that belong to this species on the stages that go along the coast and through the northern part of the province because the landscape there is rather urban or it consists of farmland. In these places, the species can be seen close to the streams and at spots with local plant life.





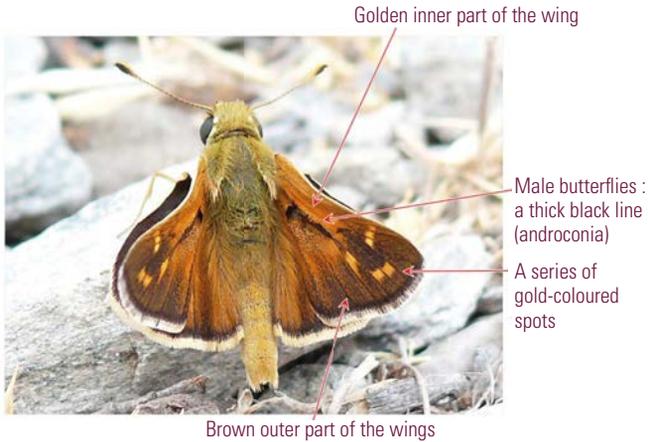
Silver-spotted Skipper

Hesperia comma (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.8 to 3.5 cm. **Open wings:** These butterflies usually only show their forewings, which are golden on the inside and brown towards the margins with a series of gold-coloured spots that do not compose an arch. Male butterflies have a thick black line (*androconia*). **Closed wings:** Very often they only show hindwings, which are greenish with a series of striking white spots.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Lulworth Skipper: It can only be seen with open wings, when it has golden spots which make a clearly defined arch. It is also smaller. **Large Skipper:** When its wings are open it is not so brown, and it seems brighter with not so clearly defined golden spots. When its wings are closed, the spots can hardly be seen.



Dorada oscura

Lulworth Skipper



Dorada orla ancha

Large Skipper



BIOLOGY AND HABITAT

In Málaga, this species takes one generation to fly in July. It can be found in the mountains at an altitude between 1300 and 1900 m, and in rocky areas with thicket, which is scattered around, and a lot of herbaceous plants, used as food by caterpillars.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rare and placed in limited number of places in Málaga, but it has not been spotted along the GMP. Nevertheless, it might be found high along the stage 11 as it was seen in close surroundings with similar characteristics. What is more, even though the species has not been seen in the Serranía de Ronda, there is a possibility to see it on stage 23 at high altitudes.





Large Skipper

Ochlodes sylvanus (Esper, 1777)

DESCRIPTION

Wingspan: From 2.6 to 3.2 cm. **Open wings:** These butterflies usually only show their forewings, which are golden on the inside and brown on the outer part with a series of vague spots. Male butterflies have a thick black line (*androconia*). **Closed wings:** Very often they only show hindwings, which are green with a series of gold-coloured spots that are sometimes difficult to be perceived.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Lulworth Skipper: This species can be confused with the above one only when its wings are open, though the inside of the wings is not golden but brown and there is a series of clear spots in the shape of an arch. **Silver-spotted Skipper:** This species can be distinguished from the Large Skipper thanks to the clearer spots on its open and closed wings (in the latter case these are white). Its colour is darker brown when its wings are open.



Lulworth Skipper



Silver-spotted Skipper

BIOLOGY AND HABITAT

Only one generation a year can be seen in Málaga, and it flies in June. These butterflies live in a mountainous area, at an altitude between 950 and 150 m. They are more common in forests with well-preserved thicket and in humid places, such as northward shady slopes, rivers, streams and mountain cattle tracks. Sometimes, they can be spotted around blackberry bush, where they like to rest.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies have only been spotted along stage 11 of the GMP, where they live in limited number of places. They are likely to be found on other routes, but only in the mountains, such as the Serranía de Ronda, the Arco Calizo Central and Tejada and Almijara Mountains, above all along stages 6 and 23.





Dingy Swift / Mediterranean Skipper

Gegenes nostradamus (Fabricius, 1793)

DESCRIPTION

Wingspan: From 2.5 to 3.2 cm. **Closed wings:** Their colour is grey or light creamy white. Only female butterflies have small white spots on the inside of forewings, which cannot always be seen clearly. **Open wings:** This species does not show them very often, but when it does, we can perceive their dark brown colour and white spots on female butterflies' forewings.

KEY FOR VISUAL IDENTIFICATION



White spots on female butterflies' wings



Dark brown colour; white spots on female butterflies' wings.

SIMILAR SPECIES

Boebo Skipper: It is hardly ever seen with open wings. When its wings are closed, the hindwings. Are yellowish with black spots, some of which have a white centre. There are bigger white spots on forewings.



BIOLOGY AND HABITAT

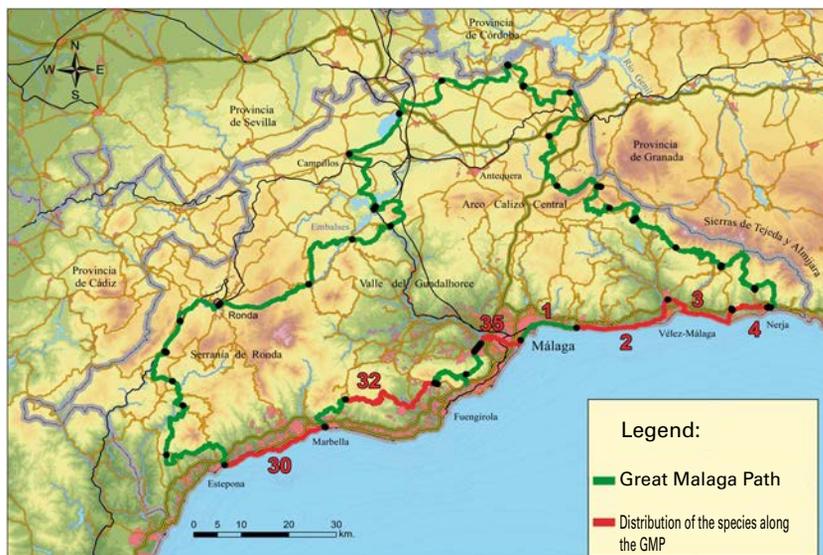
They take several generations to fly during spring and until the beginning of autumn, and they are most commonly seen in summer and autumn.

These butterflies live above all close to the lower sections of rivers and streams, where river beds are dry almost throughout the year, and on river terraces. To a lesser extent, they can be found at dunes, which are becoming scarce, sandy shores, and coastal marshes. They are migratory kind of butterflies, so they can sometimes be observed in urban areas, parks and gardens where they drink from ornamental plants. They always live at altitudes which are lower than 400 m.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is frequent at lower altitudes and on coastal parts of the GMP, although it is rare and can be found in limited number of places, above all at lower rivers and streams which are dry or with seasonal flow. There is a probability the species can be spotted at other places along the northern stages of the path in Málaga.





Borbo Skipper

Borbo borbonica (Boisduval, 1833)

DESCRIPTION

Wingspan: From 2.5 to 3.5 cm. **Closed wings:** Hindwings are yellowish with small black spots, some of which are white in the centre. Forewings are the same at the apex, while the other part is brown with white spots that increase in size towards the inside of the wings. **Open wings:** This species does not show them very often, but when it does, we can perceive their dark brown colour and white spots on forewings.

KEY FOR VISUAL IDENTIFICATION

Yellow ground colour



Small black spots, some of which are white in the centre

Dark brown

White spots that increase in size towards the inside



SIMILAR SPECIES

Mediterranean Skipper (*Gegenes nostradamus*): This species can hardly ever be seen with open wings. When its wings are closed, they are grey or creamy white. Female butterflies have some white spots on the forewings, which are sometimes difficult to notice.



BIOLOGY AND HABITAT

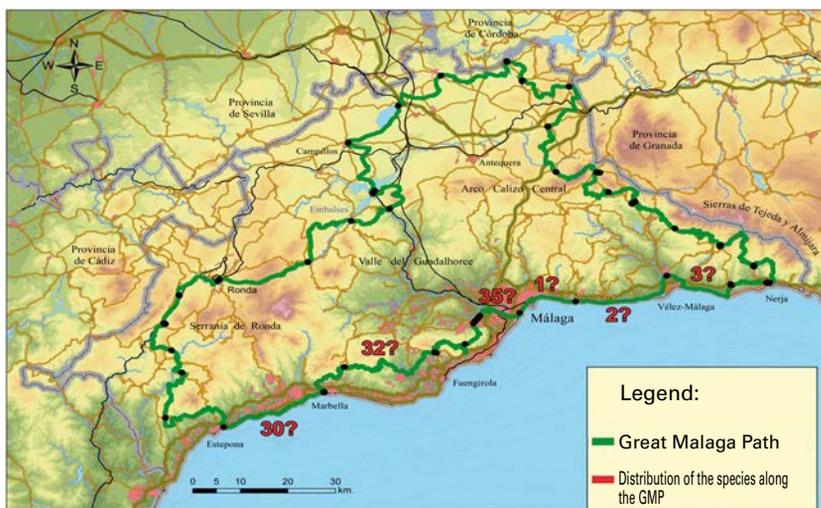
This migratory species has recently been noticed in Málaga in autumn, but there is no certainty that it is located there. Its closest colonies are in Cádiz, where there create three generations a year, and live on marshy ground, and spots which are frequently covered in puddles because this is where its foodplant, a gramineous plant *Polypogon viridis*, can be found.

In Málaga it has been spotted in urban areas, such as Teatinos, close to the University of Málaga, the mouth of Guadalhorce, and the Fuengirola and the Gudaiza rivers. The species is considered to be endangered by the Red List of Threatened Andalusian Invertebrates, but it is protected by the law.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies have not been seen along the GMP, but due to their migratory behaviour and some data obtained in Málaga, they might appear at various points along the coastal stages, above all on stage 30, close to the River Guadaiza as it is said to be seen at its upper part. There is also a probability to observe the species close to the Pasadas River in Mijas, on stage 32, considering that it has been seen several times at its lower reaches. It could also be settled, or it might settle in the future, in the plain of the Guadalhorce, close to the 35th stage. The possibility of seeing it in the city of Málaga or to the east cannot be rejected either.





Wood White

Leptidea sinapis (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3 to 4.4 cm. **Closed wings:** White background with plenty of dark scales, which vary from one butterfly to another. **Open wings:** It is almost impossible to see their wings open. Their background is clear white, with one large grey spot at the apex, which is less prominent in the case of female butterflies. The latter feature can be observed while the butterfly is flying around us. All wings are round, and their flight mode is unstable.

KEY FOR VISUAL IDENTIFICATION

White ground with dark scales



Rather rounded wings.

Large spot at the apex

Rather rounded wings



Photo: Rafael Obregón Romero



SIMILAR SPECIES

When still, these butterflies cannot be confused with other species. While flying, they can be confused with other white butterflies, but the way they sway when they fly, the round shape of their wings, as well as the big spot at the apex help their identification.

BIOLOGY AND HABITAT

They take several generations to fly during spring and summer in well-preserved forests. There they tend to get close to wet areas, such as rivers, streams, cattle tracks and northward shady slopes. These places shelter plants which their caterpillars feed on, such as leguminous plants: Spanish Vetchling (*Lathyrus clymenum*) and Hairy Canary Clover (*Dorycnium hirsutum*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be found at limited number of spaces along the GMP, on the stages that go through the Serranía de Ronda. It might also be seen along 22, 24, 29 and 31 stage. It is less probable but not impossible to spot other populations along the stages in the east of Málaga, above all those that go through the Tejeda and Amijara Mountains and the Arco Calizo Central, although this has not been reported yet.





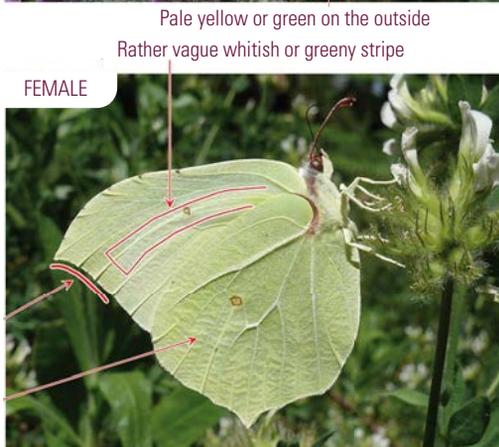
Brimstone

Gonepteryx rhamni (Linnaeus, 1758)

DESCRIPTION

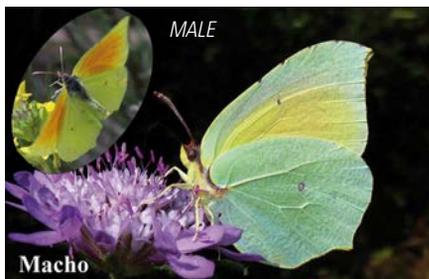
Wingspan: From 4.5 to 6.4 cm. This species seems round, with a sharp tail on each wing, which is round and placed at the apex in the case of forewings, and in the middle in the case of hindwings. **Closed wings:** Male butterflies have pale yellow or green colours on all wings, while females' wings are light green or white, with a same colour stripe on the forewings which is rather vague. **Open wings:** These butterflies can hardly ever be seen with open wings. Male butterflies can be identified while flying, as they are rather big and have bright yellow colour on all wings. Female butterflies are white and impossible to be identified while flying, but they can be recognized by the round shape of its apex when they are still.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Cleopatra: Male butterflies can hardly be seen with open wings or while flying, but when they do so, we can see a big orange spot over the greatest part of the forewings. The colour can be seen from the other side as well when butterflies are still and it makes a fine contrast to the green margins of the forewings and hindwings. Moreover, the red margin under the apex makes an angle in the case of the Cleopatra, while the Brimstone's margin is round. Female butterflies have a yellowish stripe on the forewings, which is parallel to the front margin, and it stands out from the rest of the wings due to their white and green colour. Moreover, the margin under the apex, forms an angle instead of being round as in the case of the Brimstone.



BIOLOGY AND HABITAT

This species' adult butterflies hibernate, so they can be seen throughout the year. They wake up in order to reproduce, mainly in March, and a new generation of their descendants, generally, appear in June and fly until November. Then they hibernate in December and January, and come back the following year in order to start the cycle again. Brimstones live in forests and on scrubland. This is because they prefer wet and shady places, so they can also be seen close to rivers, streams and cattle tracks. The foodplants that caterpillars live on, such as Italian Buckthorn (*Rhamnus alaternus*) and the Black Hawthorn (*R. lycioides*) are bound to be found in this kind of spots as well.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is rather spread along the GMP stages, but it only lives at specific places. At the coast, above all, at the stages that reach beaches or belong to towns, this species cannot be spotted. It can only be found along the stretches which head to the inland, as well as in the north of the province, where it lives close to the rivers and streams which shelter local plant life and the foodplants this species' caterpillars feed on.





Cleopatra

Gonepteryx cleopatra (Linnaeus, 1767)

DESCRIPTION

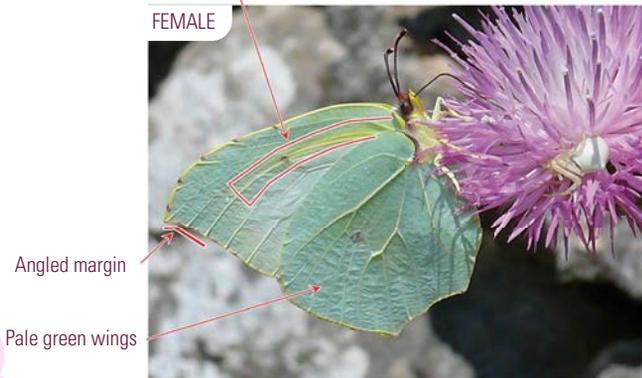
Wingspan: From 4.5 to 6.8 cm. This species seems round, with a sharp tail on each wing, which is round and placed at the apex in the case of the forewings, and in the middle in the case of hindwings. **Closed wings:** Male butterflies have green wings. The forewings are striking yellow when they are open. The colour spreads to the inner part of the wings and turns orange under the light. On the forewings, a yellow or orange stripe stands out. **Open wings:** These butterflies can hardly ever be seen with open wings. Male butterflies can be identified while flying, as they are rather big and have a large orange spot over the greatest part of the forewings. Female butterflies are white and impossible to be identified while flying, but they can be recognized by the round shape of its apex when they are still.

KEY FOR VISUAL IDENTIFICATION

While flying, an orange spot stands out and covers most of the wing



Yellowish or orangey stripe stands out on the wing



SIMILAR SPECIES

Brimstone: The male butterflies, which are not commonly seen with open wings, do not have a big orange spot on the forewings, as they are bright yellow. When their wings are close, Brimstones are not green as the Cleopatra, but rather yellow. The margin under the forewings apex is round. Female butterflies do not have a yellowish stripe on the forewings, which is parallel to the front margin, and it does not stand out from the rest of the wings due to their white and greenish colour. Moreover, the margin under the apex, is round not angular.



BIOLOGY AND HABITAT

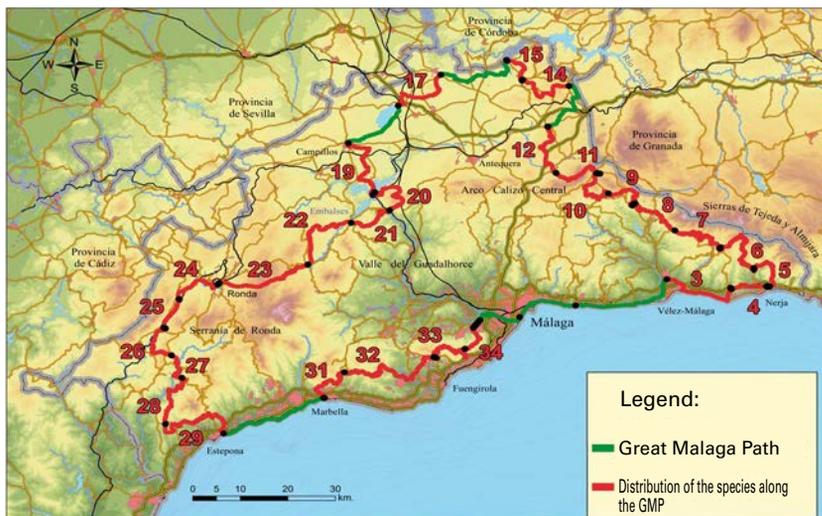
These butterflies fly throughout the year, and their biology is very similar to the Brimstone's. They count on only one generations which hibernates, but opposite of the Brimstone, the Cleopatra wakes up on warm winter days, when it starts the reproduction process. Nevertheless, the butterflies normally end with hibernation during spring, mainly in March, as in June the major part of new generation descend from the hibernating butterflies.

These butterflies share their habitat and foodplants with Brimstones, although Cleopatra butterflies are more common and numerous. They can be seen in all kinds of forests and scrubland, even in those which have been degraded. They often go to wet and shady places, close to rivers, streams and cattle tracks.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

They are distributed along the Great Path similarly to the Brimstone, though there are more of them and they do not limit themselves to certain kind of places. The same as their fellow butterflies, they are not common at the stages close to the coast, but they are also scarce in the north of the province. However, they can be seen round rivers and streams with local vegetation and their foodplants.





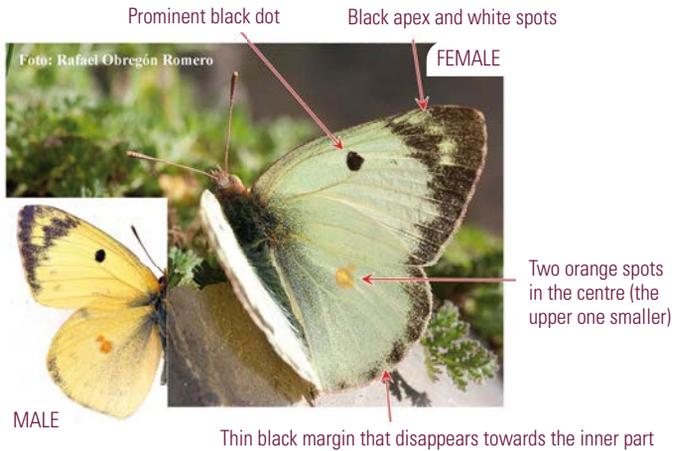
Berger's Clouded Yellow

Colias alfariensis Ribbe, 1905

DESCRIPTION

Wingspan: From 4 to 4.5 cm. **Open wings:** Male butterflies are shining yellow colour and female are light yellow or whitish. Both sexes have a striking black line on the forewings, with a black apex and spots that share the same colour as the background. On the hindwings, black margins are rather thin, and disappear before they get to the anal angle. There are two orange spots in the centre. **Closed wings:** The background colour of the closed wings is yellow. There are two white spots surrounded by black and white circles.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Dark Clouded Yellow / Common Clouded Yellow:

When their wings are open, both sexes are intense mustard colour. Male butterflies' apex is entirely black, while female butterflies have yellow spots. On their hindwings, the black stripe is broader and well-marked, and it stretches all to the anal angle. Female butterflies make a spiral, similarly to the Berger's Clouded Yellow, though they has many scales on the hindwings and, therefore, seem rather dark. When their wings are closed, they are brighter yellow colour than the Berger's Clouded Yellow, or they are green. The shape of a spiral of these two species is the same, so they cannot be distinguish if there is no light to see the black colour on the Dark Clouded Yellow's hindwings.



Female

Male

Female: spiral

BIOLOGY AND HABITAT

They take several generations to fly in spring and at the beginning of summer, but the species is rare and rather unknown in Málaga.

There it limits to mountainous areas, such as pine forests, scrubland, pasture and bushes at an altitude that ranges from 400 m to 1780 m.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It has not been seen along the GMP, but it has been spotted in the areas that surround stages 11 and 33, so it might be seen at the stages as well. There is also a possibility to find the species in the mountains, such as the Serranía de Ronda, Arco Calizo Central and the Tejada and Almijara Mountains.





Dark Clouded Yellow

Colias crocea (Geoffroy, 1785)

DESCRIPTION

It is also known as Common Clouded Yellow. Wingspan: From 4.2 to 5.4 cm. **Open wings:** Both sexes are bright mustard yellow. The apex and the wings margins are black in the case of females. The hindwings have black margins that stretch to the anal angle. There is a big black spot on each of the frontwings. There are females, known for its spiral shape, which are white instead of yellow, and seem grey because of a lot of dark scales on their hindwings. **Closed wings:** They are white or greenish with white dark-rimmed spots in the shape of an eight. Spiral-shaped females are similar to female Berger's Clouded Yellow butterflies.

KEY FOR VISUAL IDENTIFICATION

Wide black apex and the wings margins

Big black dot on each



FEMALE

Female: spiral



MALE



Black margins stretch to the anal angle

White spots (only females)

White dark-rimmed spots in the shape of an eight

Female: spiral



Bright yellow or greenish

SIMILAR SPECIES

Berger's Clouded Yellow: When their wings are open, male butterflies are less bright than the above species, and females are white. The black margins on hindwings are thinner and shorter, as they do not reach the anal angle, and without dark scales on the inner part of the female wings. This is why they are lighter than spiral-shaped Dark Clouded Yellow. The yellow colour is duller when they close wings. Spiral-shaped female butterflies are very similar and difficult to distinguish.



Female



Male



BIOLOGY AND HABITAT

There are several generations of the species throughout the year. Populations grow in winter and spring when butterflies come from Africa, as well as in autumn thanks to the butterflies that proceed from Central and Northern Europe.

Due to their migratory character and the fact that their caterpillars feed on leguminous wild plants, they can be seen in diverse habitats, spreading from high altitudes to urban zones, such as parks and gardens. It can also be seen along the coast and close to the sea while it migrates to the north.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These are one of the most common and numerous butterflies in Málaga. They can be seen all along the GMP, although less along the coast and in the north of the province.





Orange-tip

Anthocharis cardamines (Linnaeus, 1758)

DESCRIPTION

In Spain, one of its names is *Aurora*. Wingspan: From 3 to 4 cm. **Open wings:** Both sexes have white hindwings and forewings with a black apex, which is bigger in female butterflies and has white spots on the margins. Male butterflies have a large orange spot almost all over the wings. Both sexes have a black spot in the middle of the forewings, which is bigger and in the shape of an arch in the case of females, and like a dot in the case of male butterflies. **Closed wings:** There are many irregular white and yellow greenish spots on their hindwings together with scales. On the forewings, male butterflies have an orange spot which features on both sexes wings in the shape of a dot. The apex is similar to the hindwings.

KEY FOR VISUAL IDENTIFICATION

Big orange spot

MALE

Foto: Juan Manuel Sánchez Velasco



Black apex Black dot

FEMALE

Black dot

No orange colour



Foto: José Rodrigo Dapena

Black apex with white spots on the margins, and plane inside

Irregular white and green and yellow spots

Big orange spot on male butterflies' wings

Black dot



Foto: Rafael Obregón Romero

SIMILAR SPECIES

Male butterflies cannot be confused when the orange spot is possible to be seen. When their wings are closed, both female and male butterflies can be confused with the Western Dappled White, the Portuguese Dappled White and the Bath White, but these have different shapes on the wings and generally vague margins. When female rests with open wings, it can be confused with the same species, as well as with Green-striped White, but all of them have white spots inside of the apex at the forewings, and the Bath White has dark spots on the hindwings.



Western Dappled White



Portuguese Dappled White



Green-striped White



Bath White

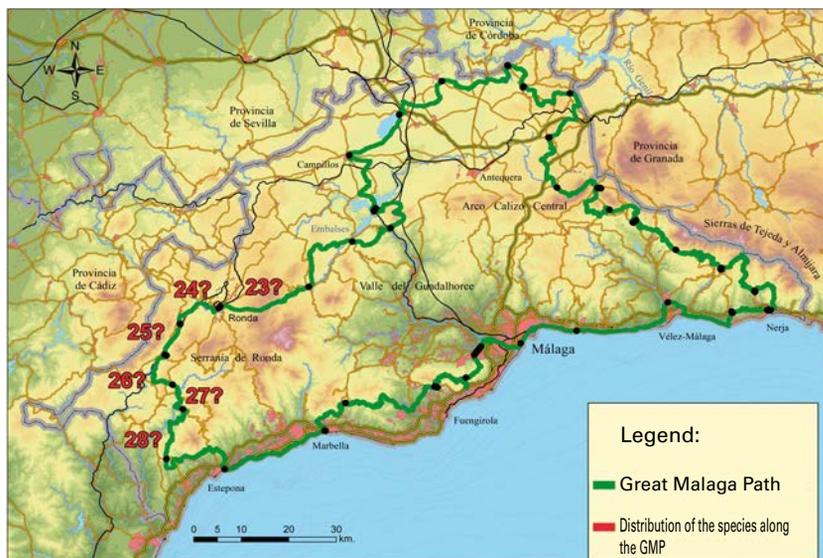
BIOLOGY AND HABITAT

This species takes one generation to fly in March and May, in humid environment, forests close to rivers, and well-preserved cork oak forests. These caterpillars feed on the cruciferous plants which belong to *Biscutella*, *Sinapis*, *Alliaria* and *Capsela* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The above species is rather rare and can be found only on specific and limited number of places in the Province of Málaga, though it has not been spotted along the GMP. Nevertheless, the conditions for this species are ideal along the routes that go through the Valleys of the Turón, Guadiaro and Genal. Actually, two populations have been seen at the latter one.





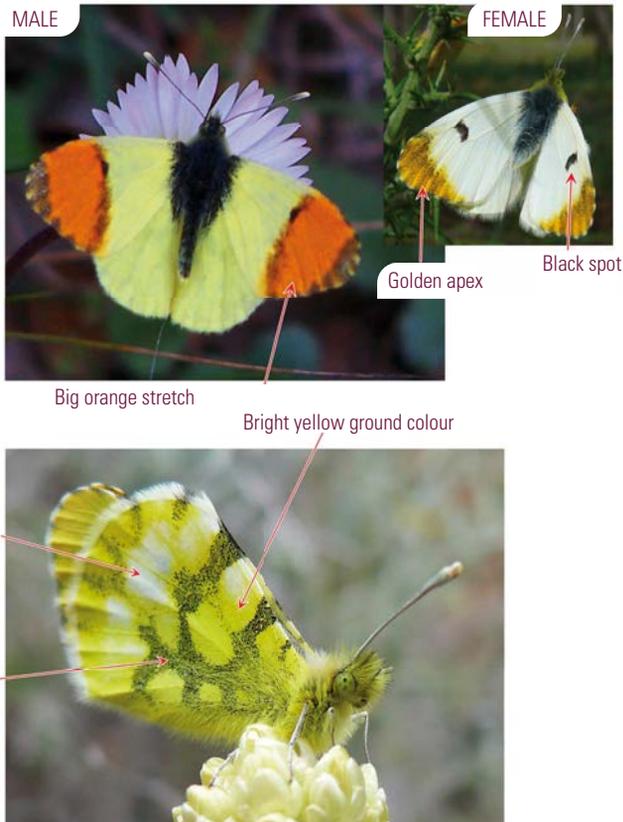
Provence Orange Tip

Anthocharis euphenoides (Staudinger, 1869)

DESCRIPTION

It is also called Moroccan Orange Tip, while its common Spanish name is *Bandera española* [Spanish Flag]. Wingspan: From 3 to 4 cm. **Open wings:** Male butterflies are yellow with big orange spots, which stretch over the greatest part of the forewings. This feature can be seen even when they are flying. Female butterflies are white, they have an apex and golden forewings, as well as a black spot in the centre of the wings. **Closed wings:** Both sexes' hindwings have yellow background, covered in dark spots, and white spots on the outer margins, which are too vague to be seen on some butterflies. When they rest with open wings, these are orange in the case of male butterflies and white in the case of females.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Sooty Orange Tip: It is bigger than the Provence Orange Tip. When its wings are open, it can only be confused with the Provence Orange Tip, but its forewings apex is black with an orange spot in the centre. When their wings are closed, both male and female butterflies have dark and white spots. Moreover the angle at the forewings is rather prominent at the front margin. As it has already been mentioned, male Provence Orange Tips can be easily recognized while flying, but they can be confused with Cleopatra male butterflies, which are also orange and yellow, though a bit bigger and their flight mode is slower.



BIOLOGY AND HABITAT

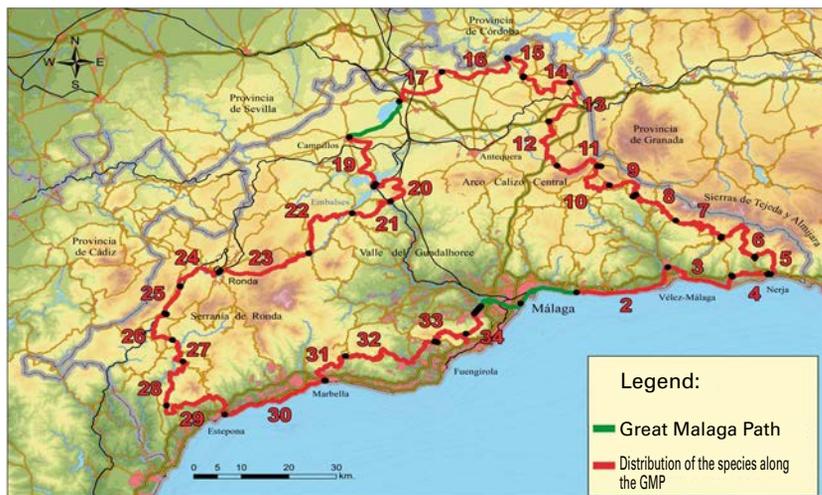
This species butterflies fly progressively higher from the end of winter to the end of spring. They take one generation a year to do so, though the emergence period is rather long. Sometimes an adult butterfly can be seen in the middle of summer.

They live in all kinds of forests and thicket, even around almond and olive trees or in abandoned woody crops. Their flight mode seems tense. They only stop to drink from flowers. Nevertheless, they can easily be seen while resting in the morning or when it is cool and cloudy at road ditches, forest tracks and paths. You can often see them resting on their caterpillars' food plant in Málaga, *Biscutella sempervirens*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be seen all along the GMP, even on the stages that go through the north of the province, although at limited places where local plants found their shelter.





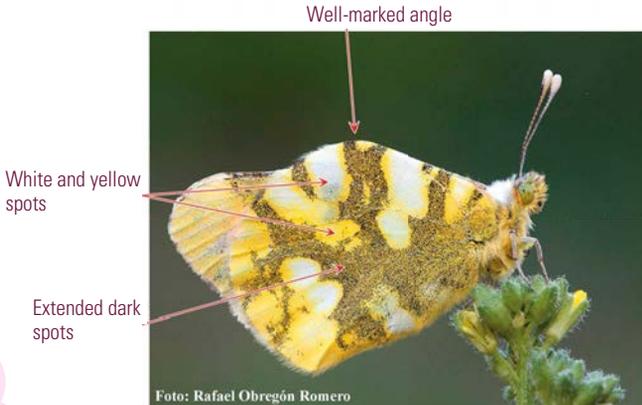
Sooty Orange Tip

Zegris eupheme (Esper, 1804)

DESCRIPTION

Wingspan: from 4 to 5 cm. **Open wings:** Both, female and male butterflies are white. The apex on the forewings is black and there is a long golden spot on the inner part of it. Moreover, there is a black spot inside of the wings. **Closed wings:** Both sexes' hindwings have yellow background, surrounded by black spots on the hindwings. The hindwings have a marked angle on the front margin.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Province Orange Tip: It is smaller. When it rests with open wings, it can only be confused with the female Sooty Orange Tip, though the latter one has golden colour apex. With closed wings, the Province Orange Tip has no angle which is highlighted on the forewings front margin, and there are less white spots and dark shapes over its wings.



BIOLOGY AND HABITAT

It takes one generation a year to fly from March to May. It flies over open areas, above all, at the foot of the mountain and at the limits of dry-land crops fields, where its caterpillars' foodplants, such as Hoary Mustard (*Hirschfeldia incana*) and Dyer's Woad (*Isatis tinctoria*) can be found.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies are the least common and live only in precise areas in Málaga. Only one population has been spotted in recent years in countryside around Antequera. As for the GMP, the species has not been seen there, although there are testimonies about spotting it between Jimena de Libar and Benaoján at the beginning of the 20th century. If we stop to analyse the habitat of the above species and its foodplants, especially the population which has recently been discovered, we can conclude that there might be some isolated populations at the stages in the north of the province.



Legend:

- Great Malaga Path
- Distribution of the species along the GMP



Portuguese Dappled White

Euchloe tagis (Hübner, 1804)

DESCRIPTION

Wingspan: From 3 to 4 cm. **Open wings:** In this case, butterflies are white and have a black apex on the forewings with a lot of white scales, which make it seem grey. There is a long black spot in the centre of the wings, which meets the front margin. **Closed wings:** The hindwings are round with yellow background and a lot of dark scales. This is why these butterflies seem green. There are small round white spots that can be hardly seen on some examples.

KEY FOR VISUAL IDENTIFICATION



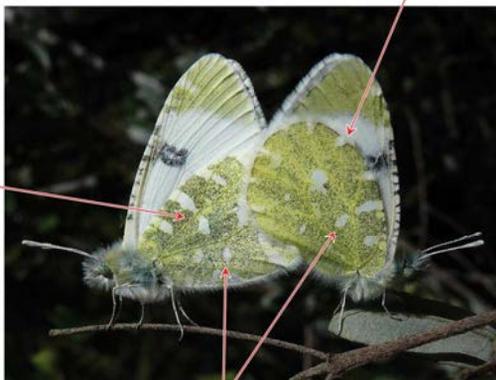
Long black spot

Black apex with a lot of white scales, so it seems grey

White spots

Foto: Francisco Rios Bosquet

Rounded hindwings without angles



Yellow background and a lot of dark scales, which seem greeny

Small white, sometimes invisible, spots

SIMILAR SPECIES

Orange-tip: When they close their wings, these butterflies are covered in white more than the Portuguese Dappled White, and the shape of the spots is rather irregular. When their wings are open, they do not have white spots on the inner part of the forewings apex and the black spot in the centre is round. **Western Dappled White:** This species is greener and the angle on the hindwings is more emphasised. Moreover, there are big white spots which are easy to be spotted. **Green-striped White:** When with closed wings, this species has long white spots. When its wings are open, the apex is darker and the spot in the middle of wings is thicker. **Bath White:** This species is totally green with angular white spots. When it rests with closed wings, the back colour at the apex is darker. The spot in the centre is larger, and there are some black spots on the hindwings.



Orange-tip



Western Dappled White



Green-striped White



Bath White

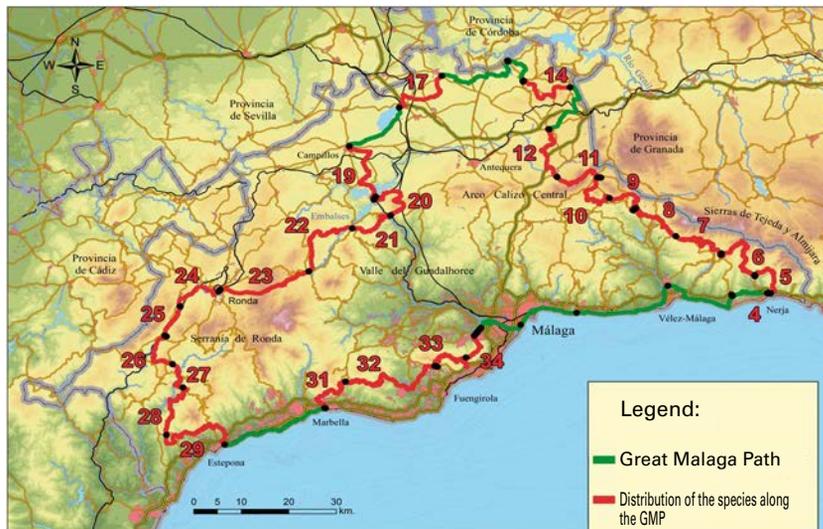
BIOLOGY AND HABITAT

It takes only one generation to fly from February to May in open spaces, above all in forests and scrubland, and on limestone and peridotite rocks, where its caterpillars' foodplants can be seen. These are cruciferous plants from *Iberis* genus. One of them is *Iberis fontqueri*, an endemic species from Málaga, called Font Quer, which live on peridotite rocks.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Although at specific places, this species is rather common along the GMP, as there are chalky and peridotite rocks mountains. It can even be seen in the north of the province.





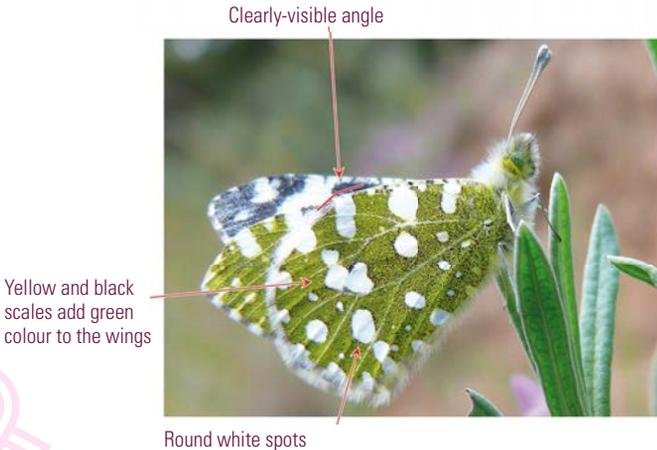
Western Dappled White

Euchloe crameri (Butler, 1869)

DESCRIPTION

Wingspan: From 3.4 to 4.8 cm. **Open wings:** They are white with black forewings apex and white spots. There is also a long black spot in the centre. **Closed wings:** an angle at the front margin stands out on the hindwings. The wings are yellow and black with scales, so they seem green. There are well-defined round white striking spots.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Orange-tip: When they close their wings, the shape of the spots is rather irregular. When their wings are open, female butterflies do not have white spots on the inner part of the forewings apex and the black spot in the centre is round. **Portuguese Dappled White:** Their yellow colour is brighter, and there is no angle on the open hindwings. Moreover, the white spots are smaller and vaguer. **Green-striped White:** When with closed wings, this species has long white spots. When its wings are open, the spot in the middle of wings has a white line in the centre. **Bath White:** When its wings are open it has angular white spots. When it rests with closed wings, the spot on the forewings centre is larger and more rounded, and there are some black spots on the hindwings.



Orange-tip

Western Dappled White



Green-striped White

Bath White

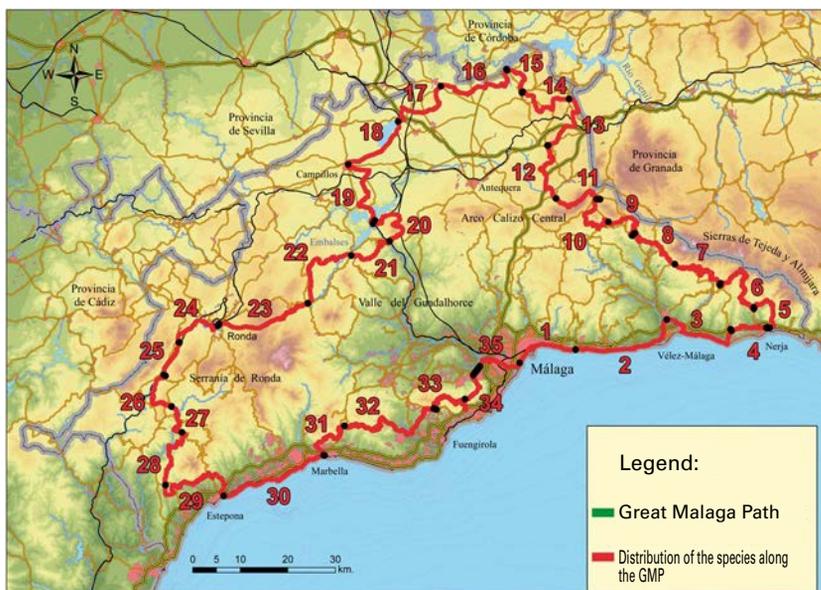
BIOLOGY AND HABITAT

Two generations fly at the same time in winter and spring. It lives in all kinds of open areas, from sparse forest and scrubland in the mountains to adapted and rural surroundings, included road ditches, uncultivated land, gardens and fields. This species caterpillars feed on cruciferous plants such as *Biscutella auriculata*, *Doplotaxis virgata* and *Crambe filiforme*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be seen all along the GMP, although, on the coast and in the north of the province, it is limited to places with wild vegetation.





Green-striped White

Euchloe belemia (Esper, 1800)

DESCRIPTION

Wingspan: From 3.4 to 4.4 cm. **Open wings:** They are white with black forewings apex and white spots. There is also a long black spot with a white inner part in the centre of the wings. **Closed wings:** the hindwings have white and black scales, so they seem green. There are also white long spots.

KEY FOR VISUAL IDENTIFICATION

Long black rectangular spot with a white centre



White spots

Black apex

Foto: José Antonio Ríos Bosquet

Long white spots



Yellow and black scales add green colour to the wings

SIMILAR SPECIES

Orange-tip: When they close their wings, the white spots are not long and the shape of the spots is rather irregular.

When their wings are open, female butterflies do not have white spots on the inner part of the forewings apex and the black spot in the centre is round. **Portuguese Dappled White:** It is more rounded. With closed wings, seems more yellowish, and when the wings are open, there is no white colour in the centre of the spot which is in the middle. **Western Dappled White:** When the wings are closed, there are oval white spots on them. When they are open, we can see a spot but it has no white line on it. **Bath White:** When its wings are open it has angular white spots. When it rests with closed wings, the spot on the forewings centre is larger and more rounded, and there are some black spots on the hindwings.



Musgosa

Orange-tip



Blanquiverdosa curva

Portuguese Dappled White



Blanquiverdosa meridional

Western Dappled White



Blanquiverdosa

Bath White

BIOLOGY AND HABITAT

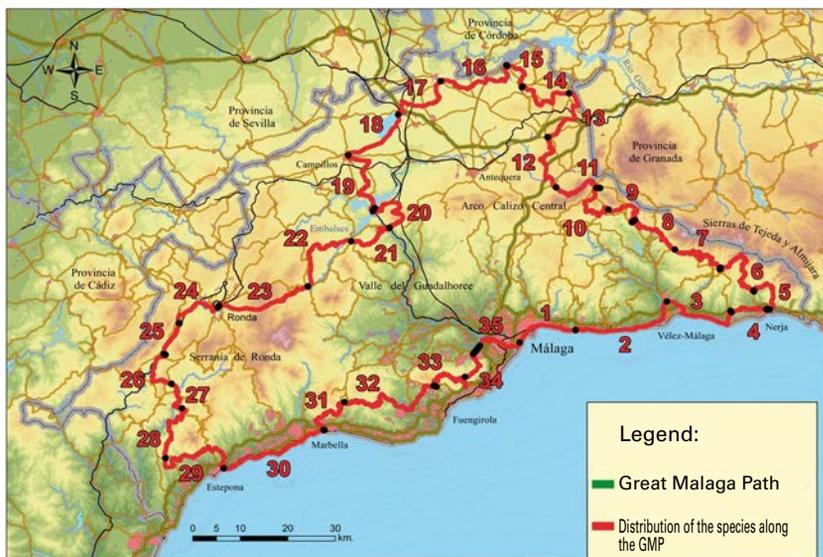
Two generations fly from winter to summer at the same time.

These butterflies can mainly be seen in rural areas, such as uncultivated land, fallow field, borders of gardens, orchards and fields, olive groves and abandoned almond tree woods, grassland, and even road ditches. This species caterpillars feed on cruciferous plants such as *Diplotaxis virgata*, *Eruca vesicaria* and *Biscutella spp.*

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found all over the path, but in the case of mountain and urban areas, and those with developed farming, it is rarer and can be found at limited number of places.





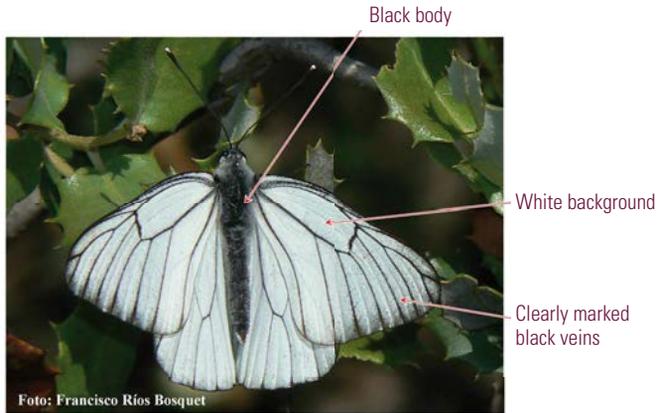
Black-veined White

Aporia crataegi (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 5 to 7.7 cm. **Open wings:** white with clearly marked veins. **Closed wings:** Depending on the butterfly, their closed wings are white or light yellow, with black scales scattered over them, and clearly marked black veins.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Due to their colours, veins and the lack of shapes on the wings, they cannot be confused with any other species.

BIOLOGY AND HABITAT

This species takes one generation a year to fly, above all, in May and June.

It lives in well-preserved forests with plenty of scrubs at an altitude of more than 300 m, where its caterpillars foodplants, bushes such as Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Iberian Pear (*Pyrus bourgaeana*), can be found.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is not common in Málaga, and its populations are limited to specific places. As for the GMP, it can be found along the Serranía de Ronda stages, at the Arco Calizo Central and some specific places, such as holm oak forests and hawthorns in the north of the province, where it is rather rare. There are possibilities that some populations can be spotted along the routes which go through the Tejada and Almiraj Mountains and the Genal Valley.





Large White / Cabbage Butterfly / Cabbage White

Pieris brassicae (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 4.9 to 6.3 cm. **Open wings:** They are white with two big spots on the forewings in the case of female butterflies. The apex is black in the shape of an arch and it stretches to the anal angle. **Closed wings:** The apex at the forewings is the same as on the inner part of the wings, although it is pale yellow. This species hindwings are also pale yellow, with black scales scattered over them, and two black spots that cannot always be seen.

KEY FOR VISUAL IDENTIFICATION



Black apex in the shape of an arch that stretches to the anal angle

White ground colour with two black dots, except on male butterflies

White background with two dots on each wing, which are sometimes absent



Yellowish apex that stretches down the margin

Pale yellow ground colour with black scales scattered over it

SIMILAR SPECIES

Large or Cabbage White is the biggest 'white' butterfly. However, there are butterflies which are smaller and they can be confused with other species. **Small White or Small Cabbage White:** The apex at the forewings is grey and not so close to the outer margin. **Southern Small White:** It has a buckled black apex, which is ached at the end, and goes down to the outer margin. **Green-veined White:** Whenever the wings are open or closed, it is rather peculiar due to its veins surrounded by dark-scales. Moreover, when the wings are stretched, the spot on the apex is buckled and the wings spots have scales which outline the veins up to the outer boarder.



Large White



Southern Small White



Green-veined White

BIOLOGY AND HABITAT

This species flies throughout the year, above all, from the end of winter to the middle of spring, and then again in autumn and the beginning of winter, which depends on how rainy the weather is. These butterflies can be found in all kinds of habitats, especially in villages, gardens, fields, and even in small towns and cities. They are less common in the mountains. Caterpillars feed on 60 different wild and cultivated cruciferous plants, such as *Diplotaxis virgata*, *Diplotaxis erucoides* and *Cardaria draba*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the most common butterflies in Málaga, which can be found at every stage of the GMP: It is less common on the coast, in the north of the province and in the mountains.





Small White / Small Cabbage White

Pieris rapae (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.5 to 5.5 cm. **Open wings:** It is white with small spots on the forewings. The apex is grey and arched in the case of male butterflies, and bulky in females, but it never goes down the margin up to the anal angle. **Closed wings:** The apex at the forewings is the same as on the inner part of the wings, although it is white or pale yellow. Hindwings are also white or light yellow with scattered black scales.

KEY FOR VISUAL IDENTIFICATION



Grey apex: arched in the case of male butterflies, and bulky in females

One or two black dots

White or light yellow ground colour



SIMILAR SPECIES

Large White: It is bigger. The apex at the forewings is blackish and arched, and stretches down close to the outer margin. **Southern Small White:** It has a buckled black apex, which is arched at the end, and goes down to the outer margin. **Green-veined White:** Whenever the wings are open or closed, it is rather peculiar due to its veins surrounded by dark-scales. Moreover, when the wings are stretched, the spot on the apex is buckled and the wings spots have scales which outline the veins up to the outer boarder.



Large White



Southern Small White



Green-veined White

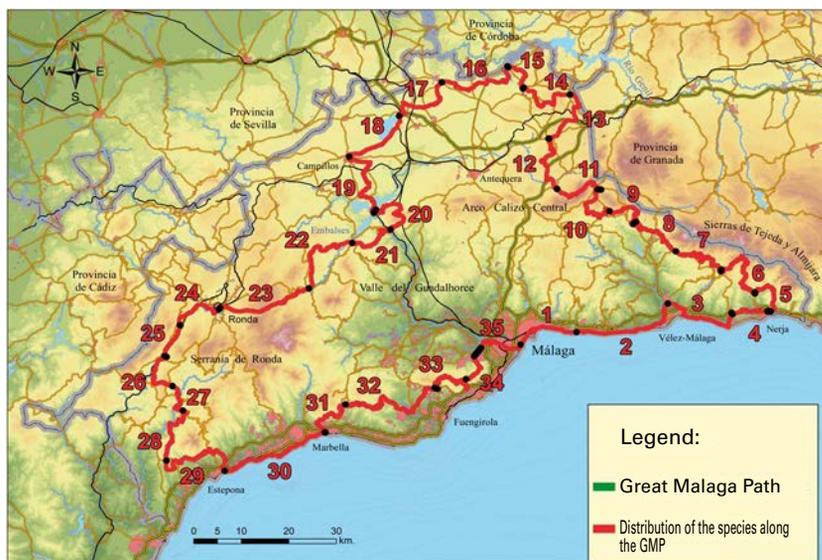
BIOLOGY AND HABITAT

There are several generations of the species throughout the year. The later the spring is the more butterflies there are. The number of them decreases in summer, but they come back in big numbers in autumn. It can be found in all kinds of habitats, from high mountains and dense forests to countryside, orchards and gardens, sandy areas and coastal dunes, as well as in small towns and cities. Their caterpillars feed of cruciferous plants, such as *Diplotaxis virgata*, *Cardaria draba*, Hoary Mustard (*Hirschfeldia incana*), and Caper Bush (*Capparis spinosa*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the most common butterflies in Málaga, which can be found at every stage of the GMP: The same as the Large White, it is less common on the coastal stages of the path and in the north of the province.





Southern Small White

Pieris mannii (Mayer, 1851)

DESCRIPTION

Wingspan: From 3.5 to 4.6 cm. **Open wings:** They have white wings with one or two spots on the forewings. The apex is black, angular at the beginning and arched at the outer margin, down which it slowly goes. **Closed wings:** The apex at the forewings is the same as on the inner part of the wings, although it is pale yellow. The hindwings are also light yellow with scattered black scales.

KEY FOR VISUAL IDENTIFICATION



Black apex: angular at the beginning and arched at the outer margin, down which it slowly goes

White ground with one or two black dots

Pale yellow apex, similar to the one on open wings



Light yellow

SIMILAR SPECIES

Large White: It is larger. The apex at the forewings is arched, and it stretches down close to the outer margin. **Small White or Small Cabbage White:** Its apex is grey and arched, in the case of male butterflies, or buckled, in the case of females, and it does not go down the outer margin. **Green-veined White:** Whenever the wings are open or closed, it is rather peculiar due to its veins surrounded by dark-scales. Moreover, when the wings are stretched, the spot on the apex is buckled and the wings spots have scales which outline the veins up to the outer boarder.



Large White



Small White



Green-veined White

BIOLOGY AND HABITAT

This species' several generations fly in spring and summer. They live in mountains, above all in forests and scrubland, but, sometimes, they can also be seen close to rivers, streams and cattle tracks. Their caterpillars feed on cruciferous plants which belong to *Iberis* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies are rare in Málaga, and limited to specific areas, such as the Almirajara and Tejada Mountains. Therefore, they can be seen on those stages of the GMP that go through these mountains.





The Green-veined White

Pieris napi (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.4 to 4.8 cm. **Open wings:** It is white with one or two big black spots on the forewings and it has a black buckled or arched apex, and black scales, which are scattered over the beginning of the forewings and outline veins to a greater or lesser extent. **Closed wings:** Its hindwings are light yellow with black scales, which outline veins to a greater or lesser extent.

KEY FOR VISUAL IDENTIFICATION

White ground with black scales scattered around



Arched or buckled black apex

Black scales outline veins

One or two black spots on each forewing

Black scales outline veins



SIMILAR SPECIES

Large White: It is larger. The apex at the forewings is arched, it goes down to the outer margin, but it has no scales which outline veins. **Small Cabbage White:** Its apex is grey and outlines veins. **Southern Small White:** It has the same apex that is angled at the beginning and arched at its end. There are no scales that outline veins.



Large White



Small Cabbage White



Southern Small White

BIOLOGY AND HABITAT

It has several generations which fly during spring and summer. Nevertheless, this species is rather rare in Málaga.

It lives in mountains, above all, close to rivers, streams and cattle tracks. Their caterpillars feed on cruciferous that belong to different genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the least common Pieridae in Málaga, as it has only been spotted in the 1980s and 1990s in Alcaucin and Ronda. It cannot be seen along the GMP, but it might exist along the stages which go through the Tejada and Almirajara Mountains, or in the Serranía de la Ronda.





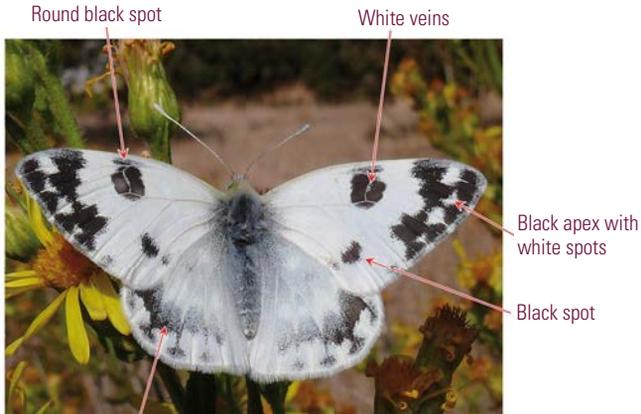
Bath White

Pontia daplidice (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.8 to 4.5 cm. **Open wings:** It is white with black apex covered in white spots on the forewings. There is also a round spot in the centre of the wings with white veins that go across it. There is a black spot close to the anal angle. The hindwings have black spots to a greater or lesser extent. Their shape is the same as the shape of the outer part of the wings. **Closed wings:** The hindwings are green with a long white spot, which is rather curvy and angled, and stretches all over the wings (its appearance depends on the butterfly). There are long spots which scatter from the margins to the centre.

KEY FOR VISUAL IDENTIFICATION



Black spots, which are similar to the patterns on the outer part of the wings



Long white spots towards the centre

SIMILAR SPECIES

Orange-tip: When its wings are closed, there are plenty of white spots, and the margins are more irregular. Female butterflies are black at the forewings apex. **Portuguese Dappled White:** This species has more yellow colour on it and rounded white spots. There are no long spots on the outer margin. **Western Dappled White:** There are white rounded spots and there are no long spots on the outer margin. **Bath White:** Long white spots go across the wings. When their wings are stretched, these last four species have no spots on their hindwings nor do they have a spot close to the anal angle on the forewings.



Musgosa

Large White



Blanquiverdosa curva

Southern Small White



Blanquiverdosa meridional

Large White



Blanca verdirrayada

Southern Small White

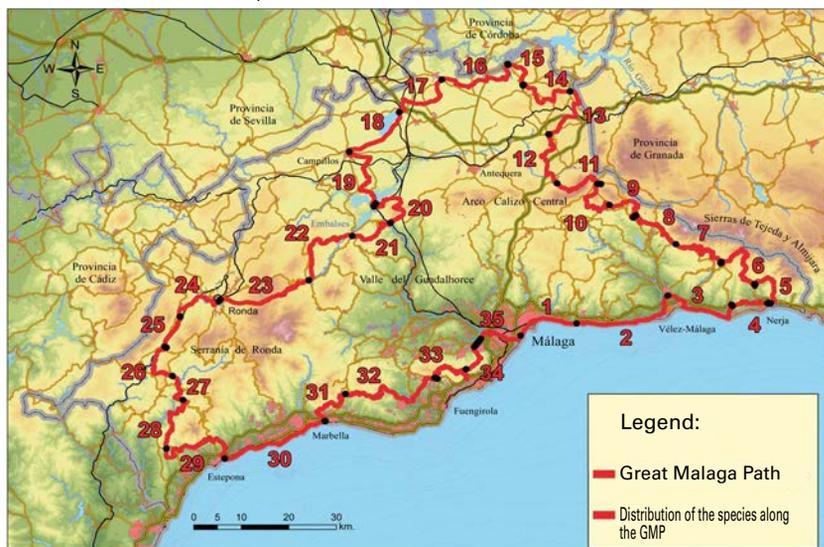
BIOLOGY AND HABITAT

There are several generations of the species that fly at the same time throughout the year. The number of butterflies that belong to autumn generation, depends on the rainfall at the end of summer. This species lives in all kinds of open-air habitats, from high mountains to urban areas parks and gardens. Its caterpillars feed on, for example, some cruciferous *Biscutella* spp., *Hirschfeldia incana*, and *Lobularia maritima*, or *Reseda alba*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found all over the path, but it is rarer the case of coastal areas and in the north of the province, where it can be found at limited number of places.





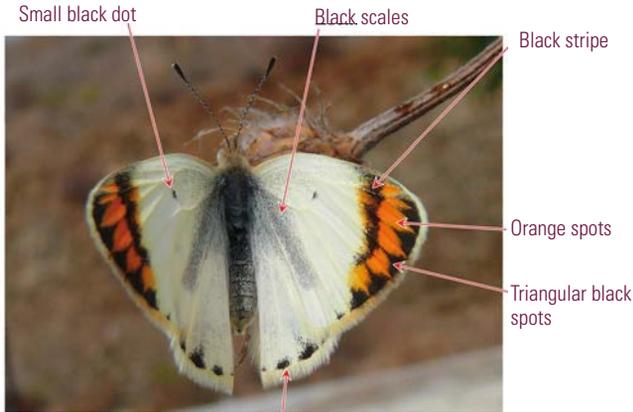
Desert Orange Tip / Small Orange Tip

Colotis evagore (Klug, 1829)

DESCRIPTION

Wingspan: From 2.8 to 4 cm. **Open wings:** On the forewings, black scales are scattered on the inner part at the base of the wings. There is a small dot in the centre of the wings, a black stripe on the apex, and triangular orange and black spots on the margins. We can see black spots on the hindwings margins. **Closed wings:** The hindwings are pale yellow with a small black dot and an orange spot next to it. Moreover, there are scales all over the wings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Although it seems similar to the male Orange-tip, these two species require completely different environment, so the surrounding where the Desert Orange Tip is likely to be found is a great clue for its identification.

BIOLOGY AND HABITAT

This is an African species which spreads in Málaga during some seasons. It can be seen at the end of summer and beginning of autumn, while it is less common in winter. It lives at places where the caper bush (*Capparis spinosa*), which its caterpillars feed on, is present. These plants can be found on the steep cliffs and rocky slopes, where vegetation is scarce. Above all, this is on the coast, but they do exist in the inland as well in rocky areas like olive groves and fallow fields.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

As this is a migratory species, it can be seen everywhere in the province when the weather is good for it. Thee butterflies sometimes reproduce around the coastal stages in La Axarquía, at the slopes and cliffs where caper bushes can be found. Some of them were seen at varied points along stage 32, which goes through Mijas. There also might be certain colonies along the stages in the north of the province, where capers are common.





Small Copper / Common Copper

Lycaena phlaeas (Linnaeus, 1760)

DESCRIPTION

Wingspan: From 2.2 to 3 cm. **Open wings:** The forewings are shiny orange with a broad orange margin. There is a series of spots over the wings. The hindwings are brown with an orange stripe parallel to the margin, and some bluish small spots above it. Some butterflies' from the last generations can be less orange and darker. **Closed wings:** The forewings are orange with black spots. The apex and the outer margins are brown. The hindwings are light brown, though they become darker at the outer margin, where you can see a thin orange stripe and some very vague small dark spots spread over the wings.

KEY FOR VISUAL IDENTIFICATION

Shiny orange ground colour

A series of dots



Broad orange margin

The latest generations butterflies are darker

Brown background

Orange stripe

Bluish spots

Light brown apex and margin

Black dots

Thin orange stripe

Vague small dark spots



Light brown colour becomes darker towards the outer margin

SIMILAR SPECIES

Purple-shot Copper: It is larger. When it stretches the wings, the brown margins are narrower, so a series of dots parallel to it can be noticed. The hindwings are completely orange and dotted. When its wings are closed, they are paler. The forewings margins have series of dots instead of brown colour. The orange spot on the hindwings is broader and outlined by dots. The rest of the wings are covered in well-defined black dots. **Province Hairstreak:** If butterflies are well-preserved they cannot be confused with the Small Copper. Nevertheless, if the colour gets worn out in time, there is to check carefully if there are white spots over the black dots on the forewings, and white spots that are parallel to the margin on the hindwings.



Purple-shot Copper



Province Hairstreak

BIOLOGY AND HABITAT

They take two or three generations a year to fly every month, above all from March to July. These butterflies live in all kinds of habitats, from high forests to places with scarce plant life, such as rural places, uncultivated and wasteland, where it can be found at limited number of places. Their caterpillars feed on the Polygonaceae, such as Common Sorrel (*Rumex acetosa*) and Sheep's Sorrel (*Rumex acetosella*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is present at all stages, although it is less common and limited to specific spots in the north of the province, on the coast, or in urban areas, where it depends on wild plants.





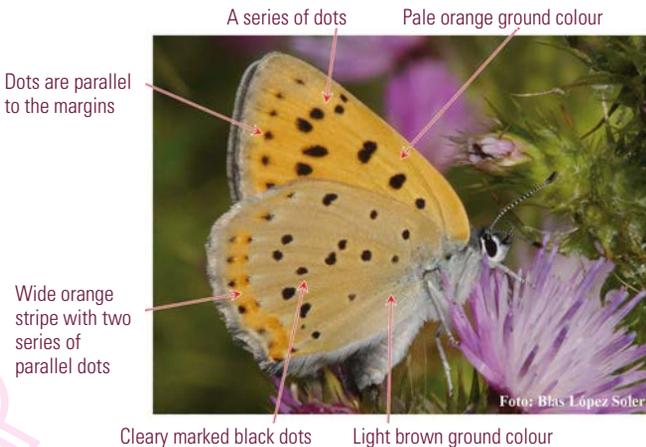
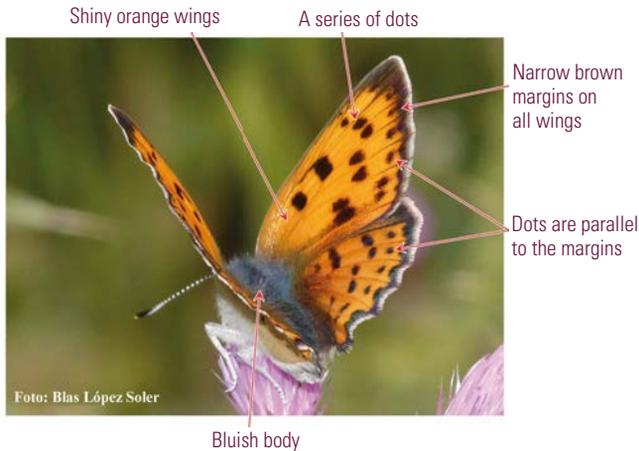
Purple-shot Copper

Lycaena alciphron (Rottemburg, 1775)

DESCRIPTION

Wingspan: From 3 to 3.8 cm. **Open wings:** Both of them are shiny orange with plenty of black dots. The margins are narrow and brown, with a series of dots parallel to them. Their body is bluish. **Closed wings:** The forewings are pale orange with some dots that are parallel to the margins. The hindwings are light brown, and they have an orange wide stripe that is outlined by dots on the outer margins. The back spots are well-defined.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Small or Common Copper: This species is smaller.

When its wings are stretched, the forewings have wide brown margins without dots that are parallel to them. The hindwings have an orange stripe that is close to the margins. When its wings are closed, the brown hindwings have no clear dots and the orange spot is thinner with no dots that surround it.



BIOLOGY AND HABITAT

The only one generation of this species flies from spring to the beginning of summer.

Their habitats are in mountainous areas at an altitude of 900 m or higher, with many open rocky zones which are a bit adapted, such as sparse forests, scrubland, meadows, bushes and pasture. Their caterpillars feed on the Polygonaceae, such as Common Sorrel (*Rumex acetosa*) and Sheep's Sorrel (*Rumex acetosella*).

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DISTRIBUTION

This species is rather rare in Málaga. As for the GMP, we only know it exists, and that it is limited to stage 11. There might be some butterflies that live at high places that belong to other routes, above all to the Sierra de Ronda, or the Huma and Almijara Mountains.





Purple Hairstreak

Favonius quercus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.5 to 3.2 cm. **Closed wings:** They are bright grey with white wavy stripes. There are black spots on the forewings outer margins. The margins on the hindwings have blur white spots, a tail in the shape of an antenna on each wing and two small orange spots, one of which is at the anal angle. **Open wings:** They usually do not stretch their wings. The background colour is brown, though male butterflies have purple wings. Female butterflies have purple parts on the forewings. In both cases, there are tails that resemble antennae on the hindwings.

KEY FOR VISUAL IDENTIFICATION



White curvy line on both wings

Brown and purple ground colour. Male butterflies almost entirely purple



Falses antennae

SIMILAR SPECIES

Spanish Purple Hairstreak: When its wings are closed, the white wavy line does not exist, and there are neither tails that resemble fake antennae. The margins are orange on each wing. There are black dots which outline the inner part. These are bigger in the case of the hindwings, which also have some small white spots on their front part. The hindwings orange stripe has a silver broken line inside of it. When its wings are open, both, male and female butterflies wings, are light brown, less intense than the Purple Hairstreak. There are also spots which stretch from the anal angle in parallel to the hindwings margins.



BIOLOGY AND HABITAT

There is one generation of the Purple Hairstreak a year, which flies at the end of spring and throughout the summer, and it is more frequent to be seen in July. It lives in oak forests, cork oaks groves and mature gall oaks because its caterpillars feed on these trees leaves. These butterflies can be spotted at an altitude between 700 and 1400 m, and sometimes up to 1710 m in the gall oaks groves in the Sierra de la Nieves. It tends to flutter about tree tops, so it can be difficult to find. They can be observed while resting for few seconds early in the morning or in late afternoon. The other parts of the day they rest on leaves, and, considering their colour and shape are similar to the above tree leaves, they can hardly be noticed.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rather rare and lives at specific places in Málaga. As for the GMP, we only know it exists, and that it is limited to stage 11. Nevertheless, some of its colonies might be found along stages 10, 13 and 14, where remaining of oak groves exist, as well as along stages 23, 24, 25 and 26.





Spanish Purple Hairstreak

Laeosopsis roboris (Esper, 1793)

DESCRIPTION

Wingspan: From 2.5 to 3.5 cm. **Closed wings:** Both wings are light grey, with an orange stripe on each of them. There are black vague spots on the forewing. These are larger on the hindwing, where some sky blue spots can be seen above them, and there is a broken silver or sky blue line in the middle of the orange stripe. **Open wings:** The background colour is dark brown. Male butterflies are covered in brown or blue more than females. They also have spots on the hindwings outer margins, which stretch from the anal angle on.

KEY FOR VISUAL IDENTIFICATION



Orange margin with black dots traces

Orange margin

Broken silver or bright sky blue line

Black spots at the orange stripe outline

Sky blue spots

Dark brown ground on both wings



MALE

Blue or purple scales. More of them in the case of male butterflies

A series of blue or purple spots



SIMILAR SPECIES

Purple Hairstreak: When its wings are closed, there is a wavy white line on them, and two tails which look like antennae on the hindwings. There is no orange stripe nor can you see dots above it. When it stretches the wings, there are more brown sections and the colour is more intense. Nevertheless, it misses spots on the hindwings outer margins.



BIOLOGY AND HABITAT

It mostly flies in June, and takes one generation a year to do so.

Its typical habitat is the ash tree, which the caterpillars feed on. This is why these butterflies can be found in rather humid zones, such as groves at the river banks, streams and cattle tracks. It tends to flutter about the above tree tops, so it can be difficult to find. They can be observed while drinking from flowers on the meadows and river banks.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species has not been spotted yet along the GMP, but it is likely to exist in ash trees groves at the 23rd stage along the Turón River. There is also a possibility to see it along the stages that follow the Guadiaro and Genal Rivers, as well as the Marín and Bebedero Streams in the north of the province.





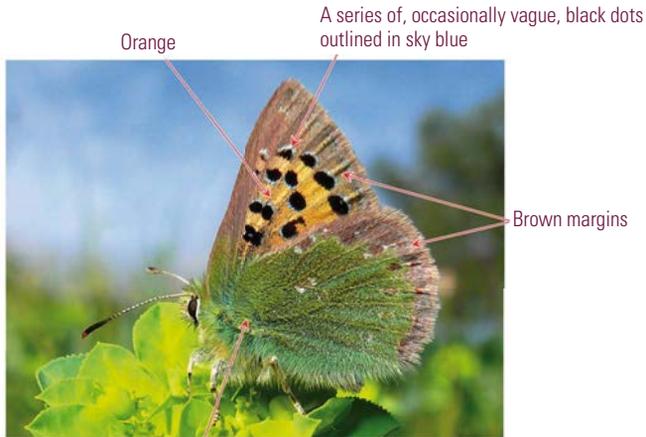
Provence Hairstreak / Cardenillo

Tomares ballus (Fabricius, 1787)

DESCRIPTION

Wingspan: From 2.4 to 3 cm. **Closed wings:** The forewings are more or less striking orange colour with a series of, occasionally vague, black dots outlined in sky blue. Their margins are wide and brown. The hindwings are rather hairy with the brown outer margin, which is wider at its upper part. The orange colour might fade and turn into brown in the case of some old butterflies. **Open wings:** This species hardly ever stretches its wings. Both, female and male butterflies, are brown with wide orange spots in the case of the latter ones.

KEY FOR VISUAL IDENTIFICATION



Hairy green wings at the base, the same as the body

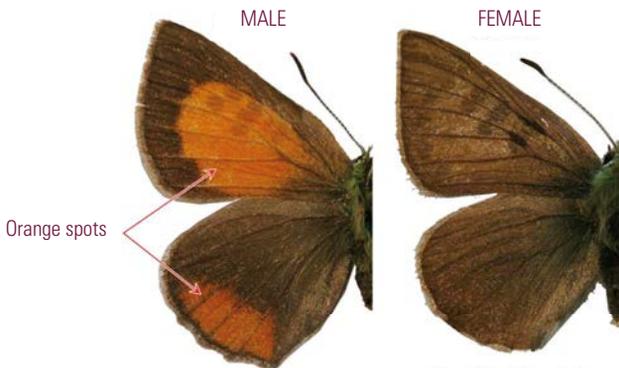


Foto: Rafael Obregón Romero



SIMILAR SPECIES

This species can only be confused with others when its wings are closed, and it has lost some of its green colour. This is when it becomes similar to the Small or Common Copper, though the latter one has just one series of dots on the forewings and has no sky blue spots around them.



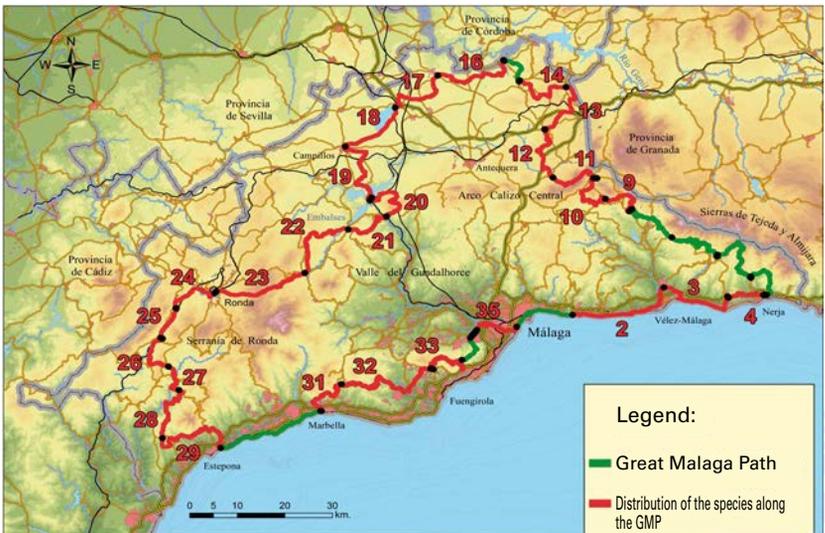
BIOLOGY AND HABITAT

They take one generation a year to fly, mainly, in winter and summer, above all, in March. These butterflies usually live in adapted areas with scarce plant life. They prefer plains, such as uncultivated and wasteland, river terraces, abandoned almond and olive groves with little ground vegetation. At these places, caterpillars feed on leguminous plants, above all creeping and low ones, such as alfalfas (*Medicago spp.*) and clovers (*Trifolium spp.*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

There are plenty of these butterflies along the GMP. They are especially spread along the less rugged areas, and rare at the coast or in the north of the province where they can be found at limited number of places. They might also be found at the stages where they have not been spotted before.





Green Hairstreak

Callophrys rubi (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.4 to 2.8 cm. **Closed wings:** They are shiny green, and the forewings yellowish. The margins are thin and brown, with white hairs (*fimbriae*). There are dots that form an arch on the hindwings, although they often reduce to an only dot close to the front margin. In Spanish, it was named *Cejjalba* [Fair Eyebrows], due to the fact that its eyes have white colour around them. **Open wings:** This species never stretches its wings, which are dark brown.

KEY FOR VISUAL IDENTIFICATION



Thin brown margin

A series of white dots which make an arch. They often reduce to one and only spot



White colour around eyes



SIMILAR SPECIES

Chapman's Green Hairstreak: This species is generally darker green and paler. Its butterflies have a wavy white stripe on each wing, which is clearly visible on the hindwings. There is red or orange colour around the eyes, although it is often vague and it can even be white.



BIOLOGY AND HABITAT

These butterflies fly in winter and spring, above all in March and April, and they take one generation to do so. Typical habitats in their case are scrubland, sunny and warm places, and above all mountains. Their caterpillars feed on different families, for example, on leguminous plants such as *Dorycnium pentaphyllum*, or on the family Cistaceae plants, such as Montpellier Cistus (*Cistus monspeliensis*) and Sage-leaved Rock-rose (*Cistus salvifolius*).

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DISTRIBUTION

The species is rather spread along the GMP, as it only does not go to the places without any local vegetation. It is more common in mountainous areas and it can be found at limited number of places along the coast or in the north of the province.





Chapman's Green Hairstreak

Callophrys avis (Chapman, 1909)

DESCRIPTION

Wingspan: From 2.4 to 2.8 cm. **Closed wings:** Both wings are green. The margins are thin and brown, with white hairs (*fimbriae*). There are clearly marked wavy lines on the wings. In Spanish, it was named *Cejirrubia* [Blond Eyebrows], due to the fact that its eyes have reddish or a kind of orange colour around them. **Open wings:** This species never stretches its wings, which are dark brown.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Green Hairstreak: Generally, this species is bright green, and it has a series of dots on the hindwings, which often reduce to one dot. The eyes are outlined in white.



BIOLOGY AND HABITAT

Only one generation flies per year in March and August, depending on the season. It, above all, lives in cork oaks groves, but also on scrubland with a lot of strawberry trees (*Arbutus unedo*), at shady and wet zones, such as rivers, streams and cattle tracks, where the redoul (*Coryaria myrtifolia*) can be found. Their caterpillars feed on these plants, especially, on the former one.

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DISTRIBUTION

It is rarely seen in Málaga. There are only two spots, stage 28 and 32, where it can be found on the GMP. In the case of stage 32, the colony settled on a lonely strawberry tree, without any other example of its kind nor redouls miles away from there. This tree was burnt in a fire that happened in the Alpujata Mountains in 2012, but it started growing from its roots all over again. Chapman's Green Hairstreaks have not been seen since then.

They might be present in other places, above all in the Genal Valley and the Bermeja Mountains.





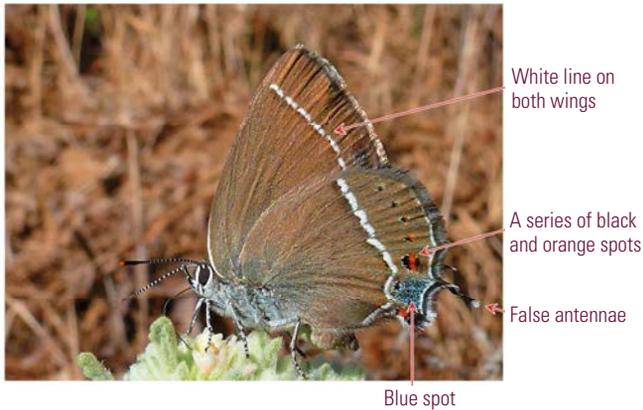
Blue Spot Hairstreak

Satyrrium spini (Fabricius, 1787)

DESCRIPTION

Wingspan: From 2.6 to 3.2 cm. **Closed wings:** All wings are brown and have a wavy white line, which goes across them and runs parallel to the outer margin. There is a tail, which looks like an antenna, above the hindwings anal angle. There is a blue spot under it. The hindwings outer margins have orange spots and a black inner part. **Open wings:** This species never shows its inner part, which is dark brown. Its hindwings have small orange spots around the anal angle and above the false antenna, which cannot always be seen in the case of male butterflies. Female butterflies have an orange spot in the centre of the forewings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

False Ilex Hairstreak: White lines are not as defined as in the case of the above species. Mostly, there is only a dotted line on the forewings and a broken line on the hindwings. There is no blue spot at the hindwings anal angle. It can hardly ever be seen with stretched wing, which are similar to the Blue Spot Hairstreak's wings.



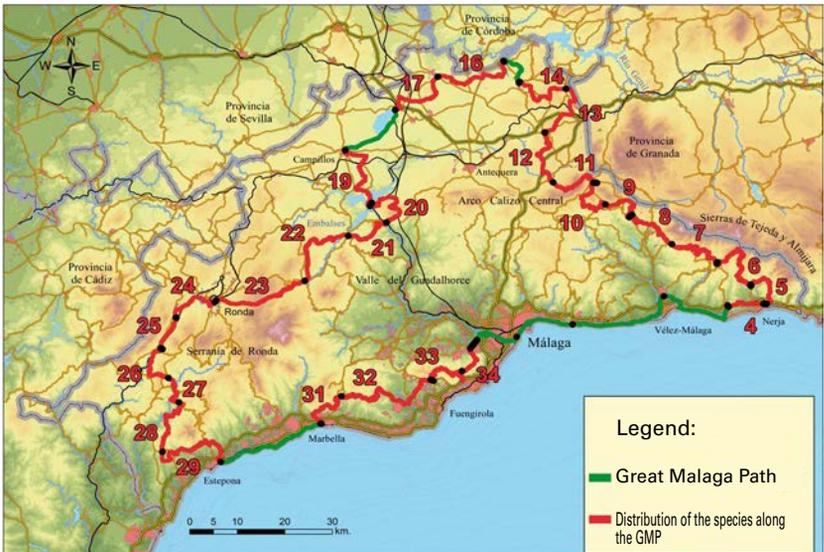
BIOLOGY AND HABITAT

Blue Spot Hairstreaks fly in May, June and July, but above all in June. They take one generation a year to do so. This species is typical for forests and scrubland, no matter whether they are dense or sparse. They are common in lower areas, as well as in high mountains in Málaga, where their caterpillars' foodplants, such as *Rhamnus* genus shrub plants like European Buckthorn (or Black Hawthorn) (*Rhamnus lycioides*) and *Rhamnus myrtifolia*, live too.

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DISTRIBUTION

These butterflies can be spotted along the greatest part of the GMP, though they are more probable to be found on the stages that go through mountains. They are rare at the coast and in the north of the province, where they live on scant local vegetation which is left in that zone.





False Ilex Hairstreak

Satyrium esculi (Hübner, 1804)

DESCRIPTION

Wingspan: From 2.6 to 3.4 cm. **Closed wings:** All wings are brown with a series of small white dots on the forewings, which are sometimes rather vague. There is a broken white line on the hindwings, and some orange spots outlined in black between the white line and the margins. A tail on each hindwing resembles an antenna. There is no blue spot under it and close to the anal angle. **Open wings:** This species never shows the inner part of the wings. Their colour is dark brown, and in the case of female butterflies there are orange spots on all wings.

KEY FOR VISUAL IDENTIFICATION

A series of, sometimes vague, white spots



Broken white line

Orange spots outlined in black

False antennae

No blue spot on the anal angle



Fotos: Rafael Obregón Romero



SIMILAR SPECIES

Blue Spot Hairstreak: There are well-defined white lines on both wings, and a blue spot at the hindwing anal angle. When open, there wings are rather similar to the False Ilex Hairstreak's wings.



BIOLOGY AND HABITAT

There is only one generation that flies in spring and summer, above all in May, July and very frequently, in June. As their Spanish name, *Quèrquera*, says, they feed on species that belong to the *Quercus* genus, so they can be found in surroundings where the following plants live: cork oaks groves, oak and gall oaks forests, as well as those with pine trees, thicket with Kermes oaks, and the already mentioned species.

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DISTRIBUTION

It can be found on most of the stages, as there are *Quercus* genus plants to a greater or lesser extent, and above all holm oaks. It is more common and plentiful on the stages which go through the Serranía de Ronda and the Genal Valley. In the Tejada and Almijara Mountains it can be spotted at specific places, and there is lack of it along the coast.





Pea Blue / Long-tailed Blue

Lampides boeticus (Linnaeus, 1767)

DESCRIPTION

Wingspan: From 2.2 to 3.4 cm. **Closed wings:** Rows of light brown and white stripes consecutively stretch over the wings, and become wider as they get close to the outer margins. There is a tail on the hindwings which resembles an antenna. There are also two black spots with a sky blue rim, which simulate eyes. **Open wings:** Both wings are sky blue or violet, above all male butterflies, which have wide dark brown margins. Female butterflies are completely brown with blue or violet scales over the wings. Both female and male butterflies have dark spots around their false antenna.

KEY FOR VISUAL IDENTIFICATION



Wide white stripe

False antenna

Rows of light brown and white stripes

Two black spots which look like eyes

MALE



Dark brown margins

Dark spots

Falses antennae

FEMALE

SIMILAR SPECIES

Geranium Bronze: This species is smaller. When it stretches the wings, which is not common, these are fully brown in the case of both sexes. When they are closed, their colour is grey or dark brown, and there are no wide stripes. False eyes can be rather small, and sometimes difficult to see. **Lang's Short-tailed Blue / Common Zebra Blue:** This species does not stretch its cinnamon-coloured wings very often. Contrary to the above species, there are no spots around the false antennae in the case of male butterflies, though female butterflies do have them. When the wings are closed, they are grey with dark spots surrounded by thin stripes. There is a broken line, which is parallel to the outer margins of each wings, as well as false eyes, surrounded by a sky blue and orangey rings.



Geranium Bronze

Gris estriada

Lang's Short-tailed Blue



BIOLOGY AND HABITAT

Several generations of the Pea Blue fly at the same time throughout the year. There are probably three generations that mainly emerge in March, from May to July and in October and November. They live in all kinds of habitats, including well-preserved forests, towns and cities, although they are more common in the sunny and open mountains. In urban areas they can be spotted in parks and gardens, where their caterpillars feed on ornamental foreign bushes, such as *Polygala myrtifolia*. As for the local plants, there are varied leguminous plants such as *Ulex spp.* and *Bituminaria bituminosa*, which are the most frequent.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be seen all along the GMP, although, on the coast and in the north of the province, it is rare and limited to specific places.





Geranium Bronze

Cacyreus marshalli (Butler, 1898)

DESCRIPTION

Wingspan: From 1.5 to 2.7 cm. **Closed wings:** Their colour is grey or dark brown, and they have white lines on both parts, as well as one dark stripe, edged in white, in the middle of each wing, which goes all over the wings. On the hindwings, there is a small white spot behind this stripe. There are sometimes one or two small dark spots around a false antenna. They also have checked hairs (*fimbriae*) on the edges of the hindwings. **Open wings:** This species hardly ever stretches its wings. Both of them are brown with checked *fimbriae* and a dark small spot next to the false antenna.

KEY FOR VISUAL IDENTIFICATION



Checked fringe
(fimbriae)

Dark stripe edged
in white

Large white spot

Small dark spot

False antennae



Checked
fringe
(fimbriae)

Small dark spot

False antennae

SIMILAR SPECIES

Pea Blue / Long-tailed Blue: This species is bigger and dark brown, with plenty of white lines and a wide white stripe on each wing. Its fake eyes are larger. When its wings are open, which is not very often, it is blue of bluish. **Lang's Short-tailed Blue / Common Zebra Blue:** This species does not stretches its wings very often. It always has some blue colour over them. When the wings are closed, they are grey with dark spots surrounded by thin stripes. There is a broken line, which is parallel to the outer margins of each wings, as well as false eyes, surrounded by a bright sky blue and orangey rings.



BIOLOGY AND HABITAT

Several of its generations are active one after another, and can be seen throughout the year in lower and coastal areas. In winter, the amount of these butterflies decreases.

They live in urban zones, in small and bigger towns or cities, as its caterpillars feed on geraniums (*Pelargonium sp.*), which are used for decorating houses, streets, parks and gardens.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This butterfly species comes from South Africa, and it was brought to Europe at the end of 1980s. It can be seen along all stages of the GMP, though it is more common along the coast. In the rest of cases and urban areas, it can be found at specific places where geraniums are used as decorative plants.





Lang's Short-tailed Blue / Common Zebra Blue

Leptotes pirithous (Linnaeus, 1767)

DESCRIPTION

Wingspan: From 2 to 3 cm. **Closed wings:** There are plenty of dark grey spots, outlined in light grey, on them. A broken grey line stretches close to the outer margins on each wing. They also have a false antenna and false black eyes, which are surrounded by one bright blue and another orangey ring. **Open wings:** This species hardly ever stretches its wings. They are rather similar to the Pea Blue's wings. Male butterflies are blue or violet, with thin brown borders, while female butterflies are brown and sometimes have no blue colour on them. Only the bottom of the wings and a small external part can be blue. The spots that look like eyes can hardly be seen in the case of male butterflies, though they are much clearer in the case of females.

KEY FOR VISUAL IDENTIFICATION

Dark grey spots outlined in light grey



Dotted lines

False antennae

False black eyes surrounded by bright blue and orangey rings

MALE



FEMALE



SIMILAR SPECIES

Pea Blue / Long-tailed Blue: This species is lighter brown, with plenty of white lines and a wide white stripe on each wing. **Geranium Bronze:** Its colour is brownish, though there is a darker stretch that stands out and goes over the wings. Behind that part there is a large white spot on the hindwings, and one or two small dark spots around the false antennae.



Canela

Pea Blue



Taladro

Geranium Bronze

BIOLOGY AND HABITAT

This species' several generations fly at the same time throughout the year. They are more common in June, October and November, although they depend on weather in the latter two months. It lives in all kinds of habitats, including shady zones in forests or mountains, which it prefers, as well as humid areas where it is rather rare and can be spotted at specific places. Its caterpillars feed on plenty of plants that belong to different families, such as leguminous plants, gorse (*Ulex spp.*) and *Anthyllis cytisoides*, as well as labiates like rosemary (*Rosmarinus officinalis*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is present at all stages of the GMP, though it is rarer and limited to specific places on the coast and in the north of the province.





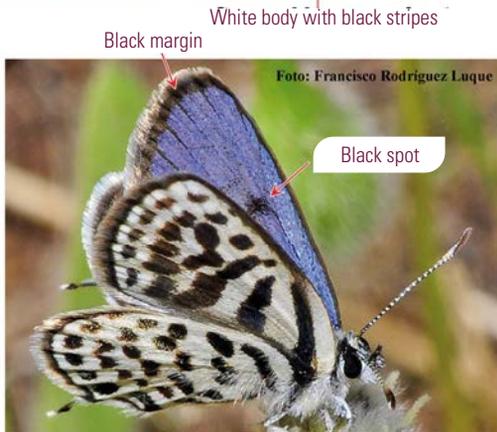
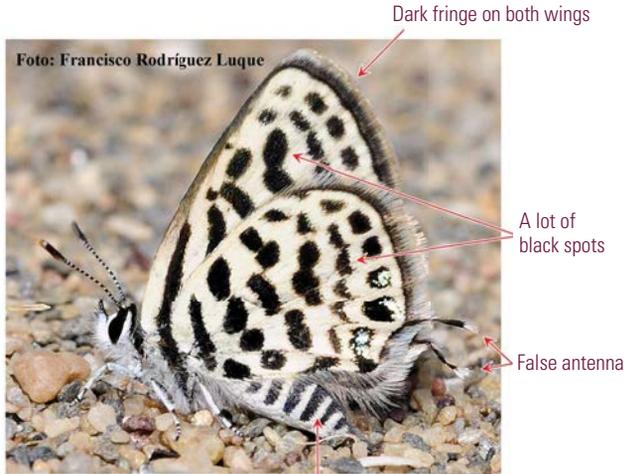
Common Tiger Blue

Tarucus theophrastus (Fabricius, 1793)

DESCRIPTION

Wingspan: From 2.1 to 2.4 cm. **Closed wings:** White background with plenty of dark scales on both wings. There is a tail on each wing that looks like an antenna. Its body is white with black stretches. **Open wings:** It hardly ever opens the wings. Male butterflies are blue or violet, with wide dark wings margins. There is a dark spot in the centre of both forewings, although, after having flown a lot, the colour of the spot fades and becomes brown. Female butterflies are brown, although sometimes they show white colour of the outer side of the wings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

This species cannot be confused with any other due to its peculiar colour and shapes, except when it rests with open wings, which is not frequent.

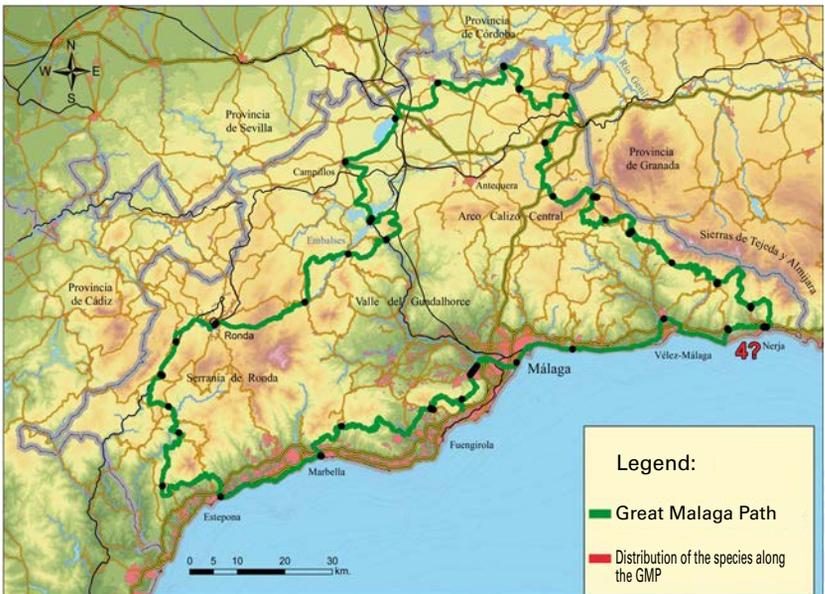
BIOLOGY AND HABITAT

Several generations fly from February to September. These butterflies live at warm and semiarid places, which are close to the sea and where Common Jujube (*Ziziphus spp.*) trees and thorny bushes, typical for such semiarid land where they are grown for its fruit, can be found. This species' butterflies flutter about this kind of plants and their caterpillars feed on them.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species has never been spotted along the GMP. Nevertheless, it was seen in Nerja and Maro in the 1980s, so there is a possibility to find some of its isolated populations along the stages that are close to this area have Common Jujube plants.





Dark Grass Blue / African Grass Blue

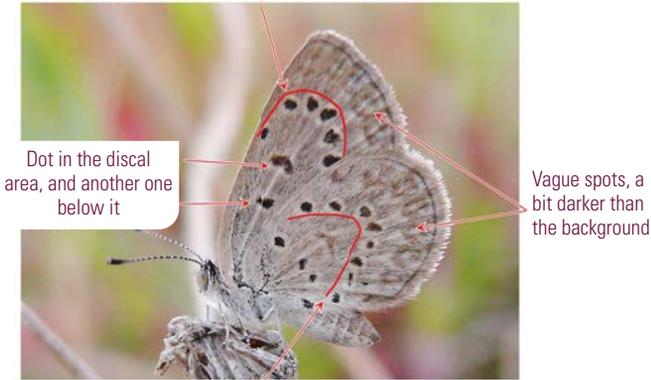
Zizeeria knysna (Trimen, 1862)

DESCRIPTION

Wingspan: From 1.8 to 2.4 cm. **Closed wings:** Their background is grey or brownish, and there are series of dots in the shape of an arch on all wings. The dots shape is more angled in the case of hindwings, while there is a dot in the discal area and another one under it on the forewings. There is a stretch between the dots and the margin with vague spots which are a bit darker than the background on both, forewings and hindwings. **Open wings:** This species hardly ever stretches the wings. Male butterflies are blue or bright violet, and the margins are broad and brown. Female butterflies have less blue parts. In some cases, there are only the blue colour vaguely remains on the forewings.

KEY FOR VISUAL IDENTIFICATION

A series of dots in the shape of an arch



A series of arched spots

Wide brown margins



Foto: Francisco Rodriguez/Laque

SIMILAR SPECIES

Panoptes Blue and False Baton Blue: They have a series of dots on the hindwings. The last dot is placed on the outer part and it forms a question mark. There are clearly marked black spots between the dots and the margin. They have checked *fimbriae*.



BIOLOGY AND HABITAT

This species flies throughout the year in lower areas and close to the sea. There are several of its generations, which become more plentiful at the end of summer.

These butterflies live in the grass which is humid almost all year, around rivers and streams, dams, ponds, reservoirs or other humid places, above all river terraces, banks and dry river beds. The species has adapted to urban zones, above all parks, gardens and the golf courses grass, where it lives whenever there is a small amount of biocide. This is thanks to their caterpillars foodplants, which are creeping plants that often live on the grass, such as leguminous alfalfas (*Medicago spp.*) and clovers (*Trifolium spp.*), or some other families plants like caltrops (*Tribulus terrestris*) and *Glinus lotoides*. They always live at altitudes which are lower than 600 m.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is very common along the GMP: It is rare and limited to specific places in the case of mountainous areas and the north of the province, while there are lot of these butterflies in urban zones with broad lawns and little amount of biocide.





Lorquin's Blue

Cupido lorquini (Herich-Schäffer, 1850)

DESCRIPTION

Wingspan: From 2.2 to 2.8 cm. **Closed wings:** The background is light grey, and there is a series of little widened dots which all form a right line, except the first one that is moved towards the inner part of the wings. There is another widened dot in the discal area. There are dots which compose an arch on the hindwings. The second dot is moved towards the inner part of the wings, and the last ones form another arch. The area between the dots and the margins is plain with the traces of some dark dots which are in no case easy to be spotted. **Open wings:** It hardly ever opens the wings. Male butterflies are bright blue with wide black margins. The black colour partly stretches along the veins too. Female butterflies are dark browns, though they seem black.

KEY FOR VISUAL IDENTIFICATION

A series of dots which all form a right line, except the first one



Last dots in a row make an arch

Bright blue male butterflies, and dark brown females

MALE



SIMILAR SPECIES

Holly Blue: This butterfly species is larger. Its grey colour is lighter, almost whitish. The dots on the forewings are completely stretched and stepped. The second dot on the hindwings is closer to their inner part. All the dots are a bit smaller, irregular and most of them seem round. **Green-underside Blue, *Glaucopsyche alexis* (Poda, 1761):** It is larger. There is a series of round dots on the forewings, which get bigger as they approach the outer margin. On the hindwings, there are often no dots or they are very small, forming a broken arch at the second dot, which is close to the inner part, while the last but one is close to the outer part of the wings. **Black-eyed Blue, *Glaucopsyche melanops* (Boisduval, 1828):** It is larger. The forewings have a series of round dots, which increase in size towards the margin, which they turn away from in the end. On the hindwings, there is another series of dots. First two are rather close to the inner part. There are traces of whitish spots on the margins.



Holly Blue



Green-underside Blue



Black-eyed Blue

BIOLOGY AND HABITAT

Only one generation a year flies from March to June. April is when they are most seen.

The species is typical for chalky and peridotite mountains, wide forests, extended thicket, and very often slopes and ditches along forest tracks, as well as ways and paths. This is where their foodplant from leguminous family, Kidney Vetch (*Anthyllis vulneraria*), can be found. It flies parallel to the ground, and neither male or female butterflies get far away from their foodplants.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is usually rare and limited to specific places along the GMP. It can be seen in the chalky and peridotite mountains, such as the Tejada and Almiijara Mountains, the Arco Calizo Central, the Sierra Bermeja and the coastal mountain ranges. There also might exist some isolated colonies along the stages that go through the mountains in the north of the province.





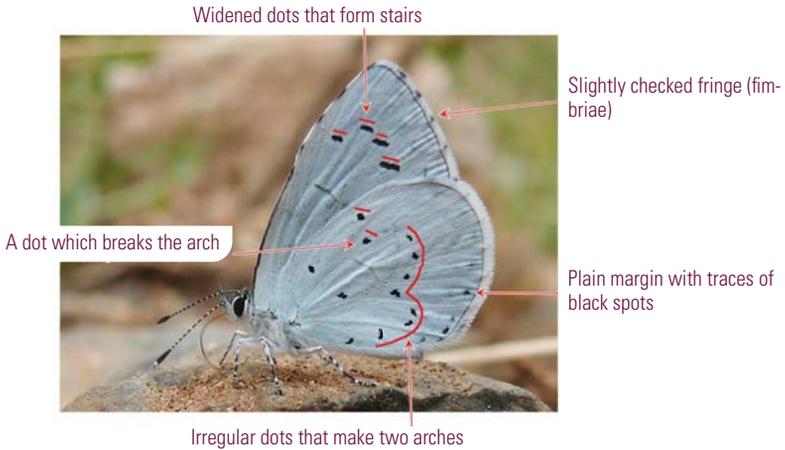
Holly Blue

Celastrina argiolus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.4 to 3.1 cm. **Closed wings:** Their colour is light grey, so they seem white. Spots on the forewings are flat, or stretched, and make a stepped arch. The wings have slightly checked external hairs (*fimbriae*). There are small irregular dots on the hindwings, which form two arches. The first of them is broken at the second dot, which is closer to the inner part of the wing. All wings have plain margins, though they might be black spots traces. **Open wings:** This species hardly ever stretches the wings. Both sexes are bright blue, with thin dark margins in the case of male butterflies. Female butterflies are not as blue because their margins are wider.

KEY FOR VISUAL IDENTIFICATION



Photos: Rafael Obregón Romero

SIMILAR SPECIES

Lorquin's Blue: It is smaller, and darker grey than the Holly Blue. The series of dots on the forewings are slightly flat but not stepped. There are round dots on the hindwings, and *fimbriae* are not checked. **Green-underside Blue and Black-eyed Blue:** Both species' grey colour is darker and it does not seem white. There are round dots, which are larger on the forewings. Their *fimbriae* are not checked.



Lorquin's Blue



Green-underside Blue



Black-eyed Blue

BIOLOGY AND HABITAT

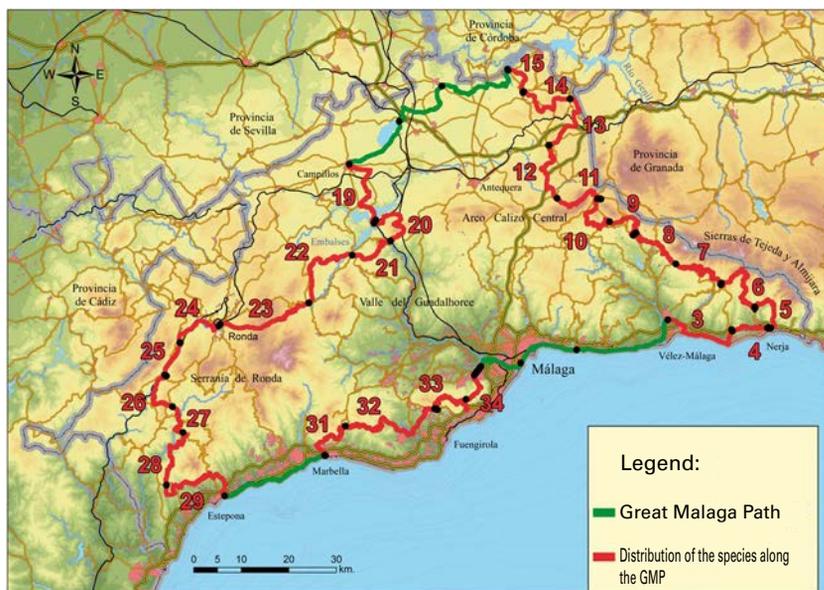
Several generations fly at the same time from January to October. The first emerges in March and the rest of them mainly from May to August.

These butterflies prefer mountains, and live close to rivers, streams, cattle tracks and other shady and a bit humid places. Occasionally, they can be found in urban areas, above all on the outskirts of mountainous villages or their parks and gardens. Caterpillars mostly feed on the ivy (*Hedera helix*) and the blackberry *Rubus ulmifolius*. Therefore, they look for shady and humid habitats where these plants live. They fly high, above blackberries and ivies. They do not rest very often, but when they do, they do it several metres from the ground.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is present at most of the stages along the GMP, except along the coast and at some of the stages in the north of the province. Anyhow, it is rare and limited to specific locations. It is more common at the stages which are close to rivers and streams, such as the Guadiaro and the Genal.





Panoptes Blue

Scolitantides panoptes (Hübner, 1813)

DESCRIPTION

Wingspan: From 1.8 to 2.4 cm. **Closed wings:** They have grey background, with a series of dots which form an arch on the forewings. Above them, another series of spots make a wider arch. A long spot in discal area has a dot underneath. There is a series of dots in the shape of an angle on the hindwings. The penultimate dot is closer to the outer part of the wing, and completes a question mark. Triangular spots that can be plain or covered in orange, are placed above the last series of dots. There are checked hairs (*fimbriae*) over the wide black background on the outer margin of the wings. **Open wings:** This species hardly ever can be seen with stretched wings. Both sexes are dark brown with many blue scales, which are more scattered around and more numerous and spread out in the case of male butterflies. The spot in the discal area has no white colour around it. The *fimbriae* are also exterior.

KEY FOR VISUAL IDENTIFICATION

Foto: José Antonio Ríos Bosquet

A series of spots make a wide arch

A series of spots make a sharp arch

Spot in the discal area

Spot under the discal area

Checked fringe, wider at the bottom

Triangular spots

Orange colour behind some of the spots

The dot which is closer to the outer part of the wing, and completes a question mark

Spot in the discal area without white outline

Checked fringe, wider at the bottom

Dark brown ground with many blue scales, which are more scattered around and more numerous in the case of male butterflies

SIMILAR SPECIES

Dark Grass Blue / African Grass Blue: There are no black spots that stand out on the wings between the series of dots and the outer margin. The spots are vague and difficult to be seen. There is no dot which completes a question mark and it is separated from the rest of dots on the hindwings. **False Baton Blue:** It has a series of flat spots between the outer margin and the main series of dots on the forewings and on the hindwings. The *fimbriae* on the forewings are rather narrow at the bottom, so they have the shape of a T. When it stretches the wings a spot outlined in white can be seen in discal area.



BIOLOGY AND HABITAT

The species flies from March to July. The butterflies which live in the north of the province fly in March and April, and those which are close to the sea and higher zones fly from May to July. Generally speaking, they live between an altitude of 400 and 1400 m. They can be found in open forests and spread thicket in mountains, as well as in steep zones in the northern part of the province, where they settle down at the foot of the chalky mountains. They always live close to the places with a lot of their caterpillars' food plants, such as the marjoram (*Thymus mastichina*). It has also been seen on *Thymbra capitata* and the Spanish Lemon Thyme (*Thymus baeticus*), but all the populations that can be found in Málaga live on the marjoram, as no butterflies have been observed on thymes.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

They follow the majoram plant, so they can be found along stages that go through chalky mountains and stretch at the foot of the mountains in the north of the province. All populations are limited to specific places. There might be some butterflies' shelters along other stages as well, above all on the stages in the northern part where it has not been spotted.





False Baton Blue

Scolitantides abencerragus (Pierret, 1837)

DESCRIPTION

Wingspan: From 1.6 to 2.2 cm. **Closed wings:** They have grey background, with a series of dots which form an arch on the forewings. Above them, another series of spots make a wider arch and have white colour above them. A long spot in discal area has a dot underneath. There is a series of dots in the shape of an angle on the hindwings. The penultimate dot is closer to the outer part of the wing, and completes a question mark. Above the last series of dots, there are flat or round black spots with orange, white and black colour over them. **Open wings:** There are checked hairs (*fimbriae*) in the shape of a T on the outer margin of the wings. This species can hardly ever be seen with stretched wings. Both sexes are dark brown with many blue scales, which are more scattered around and more numerous in the case of male butterflies. The spot in the discal area has white colour around it.

KEY FOR VISUAL IDENTIFICATION

Checked hairs (*fimbriae*) in the shape of a T



Flat or round black spots with orange and white colour over them, as well as black spots

The dot that is closer to the outer part of the wing, and completes a question mark

Spot in the discal area outlined in white

MALE



Checked fringe (*fimbriae*)

SIMILAR SPECIES

Dark Grass Blue / African Grass Blue: There are no black spots that stand out on the wings between the series of dots and the outer margin. The spots are vague and difficult to be seen. There is no dot which completes a question mark and it is separated from the rest of dots on the hindwings. **Panoptes Blue:** It has a series of flat triangular spots between the outer margin and the main series of dots on the forewings and on the hindwings. The *fimbriae* on the forewings are rather wide at the bottom, so they do not have the shape of a T. When it stretches the wings the spot in discal area is not outlined in white.



BIOLOGY AND HABITAT

There is only one generation a year that flies from March to June, above all, in April and May.

The species is common in open area, such as woodland or forests, scrubland, grassland, almond and abandoned olive groves with little amount of biocide. It mainly lives on lower hills or relatively flat areas, and at the foot of the mountains. It is scarcer in the mountains and higher slopes, from an altitude of 300 to 1200 m. Its caterpillars feed on the *Cleonia lusitanica*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It has been spotted along the stages in the inland of the province, where it lives close to oak forests, olive groves and scrubland at the foot of the hills, slopes or mountains. Its habitat and foodplant also exist at some routes in the inland and in the Serranía de Ronda, so these butterflies can probably be found along the GMP, from stage 10 to 26. Some of its isolated populations might exist in the Tejada Mountains as well.





Green-underside Blue

Glaucopteryx alexis (Poda, 1761)

DESCRIPTION

Wingspan: From 2.5 to 3.6 cm. **Closed wings:** Their colour is light grey, with a lot of greenish scales, rather vague in the case of some older butterflies, which stretch from the bottom to the outer part of the hindwings. The hindwings are more or less covered in a series of small dots which create two arches. The first one is broken at the second dot, which is close to the inner part of the wings. The series of dots on the forewings increase in size towards the outer margin. On both kinds of wings, the stretch between the dots and the margins is plain. **Open wings:** This species can hardly ever be seen with stretched wings. Male butterflies are bright blue with narrow dark margins, while females are fully dark brown.

KEY FOR VISUAL IDENTIFICATION

The series of dots that increase in size towards the outer margin and form an arch



The dot that breaks the arch

Series of dots which make two arches

Plenty of scales, which are difficult to be seen in some cases

Bright blue ground in the case of male butterflies, and dark brown in the case of females

MALE



Narrow dark margin

SIMILAR SPECIES

Lorquin's Blue: These butterflies are smaller, and have smaller dots which are rather flat on the forewings. There is a series of clearly marked dots on the hindwings, and there are no green scales at the bottom and the rest of the wings. **Holly Blue:** The series of flat stepped spots can be seen on the forewings. There are no greenish scales, irregular dots, traces of dark dots on the margins or checked hairs. **Black-eyed Blue:** This species is the most similar to the Green-underside Blue, but it can be distinguished easily thanks to the series of dots on the forewings, which stretch towards the margin and then away from it. Moreover, both outer margins have traces of vague whitish spots.



Lorquin's Blue



Holly Blue



Black-eyed Blue

BIOLOGY AND HABITAT

The species is not common in Málaga, and has only been spotted at the beginning of 1990s in the Sierra de las Nieves. Its closest populations are in the Tejeda and Almijara Mountains, in the area of Granada or the Subbaetic System in Seville. The populations in the Sierra Nevada are the nearest populations whose biology features and habitat are known. Only one generation a year flies in that area in May and June close to shady oak forests. These caterpillars feed on leguminous plants that belong to *Onobrychis* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The only place where the species was seen does not belong to the GMP. It is greatly important to report any information about spotting the species at any point along or outside of the GMP. Having analysed ecological features of these butterflies, we can confirm that there is a possibility of finding it at specific spots on stage 11, and, even, along stages 14, 23, 25 and 26.





Black-eyed Blue

Glaucopsyche melanops (Boisduval, 1828)

DESCRIPTION

Wingspan: From 2.2 to 3.2 cm. **Closed wings:** Their colour is grey, and sometimes a bit brown. On the forewings, there is a series of dots which increase in size towards the outer margin, which they later get away from. The hindwings have a series of dots which form an arch. The first one is broken at the second dot which is closer to the inner part of the wings. All wings have margins which are covered in faint white and dark spots. **Open wings:** It hardly ever opens the wings. Male butterflies are bright blue with wide dark margins. Females have less blue colour on their wings.

KEY FOR VISUAL IDENTIFICATION

A series of dots that increase in size towards the outer margin, which they later get away from



Margins with faint white and dark spots

A series of dots which form an arch

The dot which breaks the arch

Male butterflies are bright blue, while females have less blue colour on their wings



Wide dark margin

SIMILAR SPECIES

Lorquin's Blue: It is smaller, as well as its dots, which are flatten on the forewings. **Holly Blue:** It is light grey, although it seems whitish. There is a series of flat stepped dots on the forewings. Irregular dots can be seen on the hindwings. **Green-underside Blue:** This species is the most similar to the Black-eyed Blue, but it can be distinguished easily thanks to the series of dots on the forewings, which stretch towards the margin and then away from it. Moreover, both outer margins are plain, without traces of whitish or dark spots.



Lorquin's Blue



Holly Blue



Green-underside Blue

BIOLOGY AND HABITAT

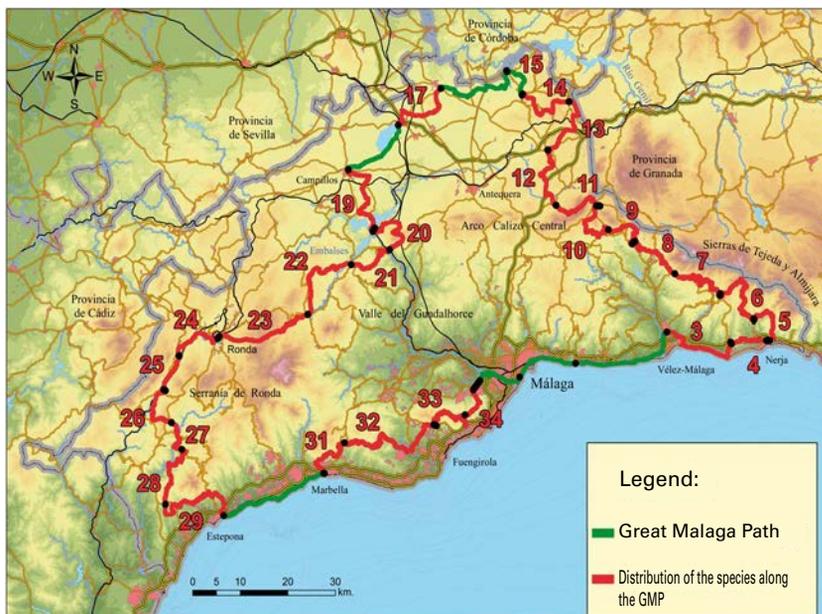
Only one generation a year flies from February to June. It is most likely to be seen from March to May, above all, in April.

It lives in all kinds of forests and scrubland where its caterpillars' foodplants, leguminous shrubs, can be found. In Málaga, its favourite foodplant is *Anthyllis cytisoides*, so they can be seen around it. Other species they visit are *Retama sphaerocarpa*, Spanish Broom (*Spartium junceum*), *Genista hirsuta* and Prostrate Canary Clover or Badassi (*Dorycnium pentaphyllum*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies can be seen along most GMP stages, though they are less common and limited to certain places on the coast and in the north of the province, where they do not exist on some stages.





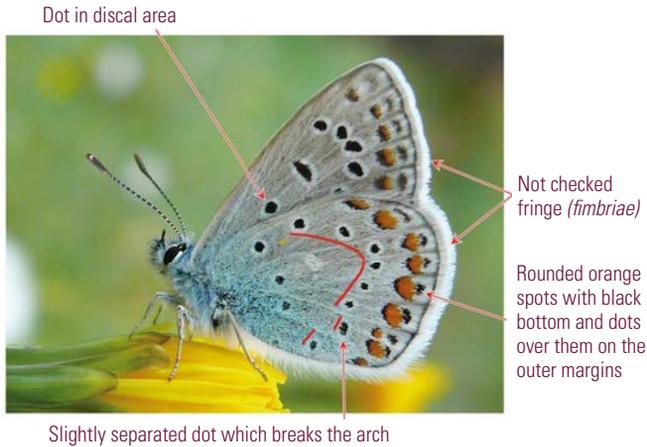
Southern Blue

Polyommatus celina (Austaut, 1879)

DESCRIPTION

Wingspan: From 2.2 to 3.6 cm. **Open wings:** Male butterflies are light grey with series of small dots on all wings. One of them is in the forewings discal area, and another breaks the arch and gets closer to the outer part on the hindwings. Female butterflies are similar, but their dots are larger and the background colour is light brown. Both sexes have a series of rounded orange spots with black bottom and dots over them on the outer margins. There are external hairs (*fimbriae*), which are not checked. **Open wings:** It hardly ever stretches its wings. Male butterflies are bright blue, with thin dark margins and, occasionally visible, small black spots on the hindwings outer margins. Female butterflies are brown, with orange spots in the shape of a half moon on the outer margins of the wings.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Mother-of-pearl Blue: It is creamy white with a dot in the discal area. There are pointed orange spots on the hindwings, and black front margins with or without a dot. **Chapman's Blue:** They do not have a dot in the discal area. There are pointed orange spots on the hindwings, and black front margins with or without a dot. **Escher's Blue:** There is no dot in the discal area. Dots are large, generally speaking. Black margins have wide pointed orange spots. There is a big black spot in the centre of the hindwings. **Spanish Chalk-hill Blue:** Male and female butterflies have orange spots on the outer margins and a series of small dots on the hindwings, which does not exist on some butterflies. They have checked hairs (*fimbriae*). **Adonis Blue:** These butterflies have checked hairs, large dots and a series of dots in the shape of a question mark on the hindwings.



Mother-of-pearl Blue



Chapman's Blue



Escher's Blue Spanish



FEMALE

Niña andaluz
Chalk-hill Blue



MALE



Adonis Blue

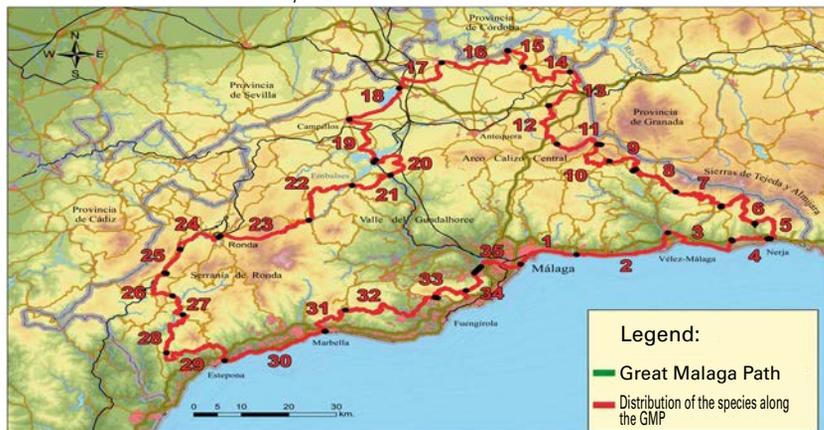
BIOLOGY AND HABITAT

This species three generations fly throughout the year at the same time. They are more active from March to July. These butterflies can be found in all kinds of habitats, including mountains and well-preserved forests, as well as in rural and adapted areas, where they can be observed in parks, gardens and wide grass zones. Their caterpillars feed on all leguminous plants, *Trifolium*, *Medicago*, *Anthyllis* and *Lotus* genus, among others.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

They are present on all stages of the GMP, except on the coast where they are more difficult to be found.





Mother-of-pearl Blue

Polyommatus nivescens (Keferstein, 1851)

DESCRIPTION

Wingspan: From 2.5 to 3.7 cm. **Closed wings:** They are light brown, without spots on the discal area. Some pointed, sometimes small, orange spots can be perceived on the hindwings. There are hardly visible or no black spots, and a series of dots, two of which are joined and separated from the rest, make the shape of a question mark. **Open wings:** They can hardly ever be seen with their stretched wings. Male butterflies have sky blue body and the base of wings. Their wings are whitish or greyish, with dark beginnings of the margins and veins. There is a series of vague black spots on the hindwings. Females are brown with large orange spots from the middle to the end of the hindwings and forewings.

KEY FOR VISUAL IDENTIFICATION

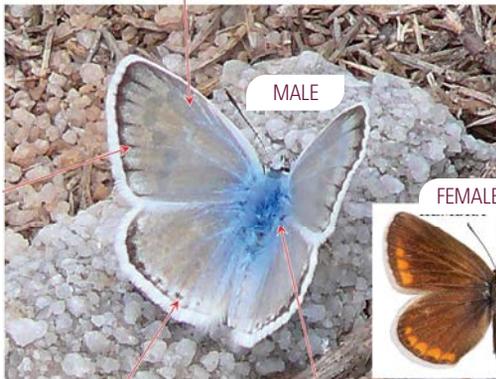
No dots on discal area



Pointed, sometimes absent, orange spots

Joined dots which are separated from the rest, and make the shape of a question mark

Whitish or greyish male butterflies' wings, and brown female butterflies' wings



Dark margins and veins

Vague small dark spots

Bluish body and the wings base

SIMILAR SPECIES

Southern Blue: They are grey of dark brown with a dot in the discal area. The orange spots are outlined and there is black colour on the front margins. **Chapman's Blue:** This species is greyish or dark brown with large orange spots. **Escher's Blue:** It is greyish or dark brown with larger dots which clearly form a question mark. There are well-marked orange spots. **Spanish Chalk-hill Blue:** Male and female butterflies have small orange spots on the outer margins and a series of small dots on the hindwings, which does not exist on some butterflies. They have checked hairs (*fimbriae*) and a dot in the discal area. **Adonis Blue:** These butterflies have checked hairs, large dots and a series of dots in the shape of a question mark on the hindwings, and a dot in the discal area.



Ícaro moro
Southern Blue



Celda limpia
Chapman's Blue



Fabiola
Escher's Blue Spanish



Hembra
Female

Niña andaluz
Chalk-hill Blue



Macho
Male



Niña celeste
Adonis Blue

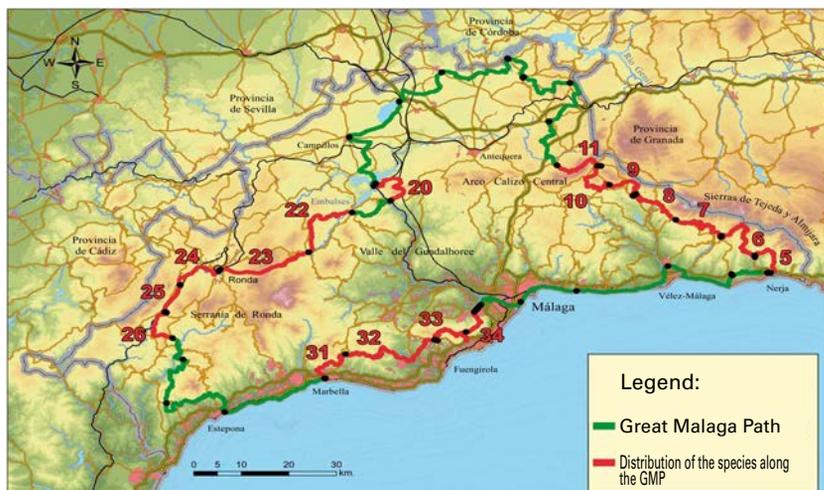
BIOLOGY AND HABITAT

This species takes only one generation a year to fly from May to August, and most commonly in June and July. It lives in chalky and peridotite mountains, in open woodland, scattered thickets, and occasionally also in decaying areas, around paths and forest tracks, stony ground, sandy zones, streams and dry cattle tracks, as this is where their caterpillars' foodplant, *Anthyllis vulneraria*, can be found.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is endemic on the Iberian Peninsula. Although it can be found on many of the stages of the GMP, it is rare and limited to specific places.





Chapman's Blue

Polyommatus thersites (Cantener, 1835)

DESCRIPTION

Wingspan: From 2.4 to 3 cm. **Closed wings:** Their colour is greyish or pale brown in the case of male butterflies, while females are brown. There are pointed orange spots that in the case of some butterflies have black tops. On the hindwings, there is a series of dots in the shape of an arch, which is broken as two dots are joined and separated from the rest. **Open wings:** It hardly ever rest with open wings. Both sexes are similar to other species, as male is bright blue and female brown with big orange spots on both wings' outer margins.

KEY FOR VISUAL IDENTIFICATION

Large pointed orange spots that in the case of some butterflies have black tops

FEMALE



No dots on discal area



MALE

Two joined dots that are separated from the rest and break the arch

Fotos: Eduardo Marabuto



SIMILAR SPECIES

Southern Blue: They have a dot in the discal area. The orange spots are outlined and there is black colour on the front margins. **Mother-of-pearl Blue:** It is light brown or whitish, and it has a lot of smaller orange spots. **Escher's Blue:** It has larger dots which clearly form a question mark. There are well-marked orange spots. **Spanish Chalk-hill Blue:** Male and female butterflies have small orange spots on the outer margins and a series of small dots on the hindwings, which does not exist on some butterflies. They have checked hairs (*fimbriae*) and a dot in the discal area. **Adonis Blue:** These butterflies have checked hairs, large dots and a series of dots that clearly form a question mark, and a dot in the discal area.



Ícaro moro
Southern Blue



Niña de nácar
Mother-of-pearl Blue



Fabiola
Escher's Blue



FEMALE

MALE



Niña celeste
Adonis Blue

BIOLOGY AND HABITAT

There are two generations a year that fly from May to July in the mountainous area of the Arco Calizo Central, composed of open woodland and scattered thickets, as well as wide grass areas and meadows at an altitude that ranges from 1000 to 1300 m. Their caterpillars feed on varied short leguminous plants, such as *Onobrychis argentea*, *Hedysarum boveanum* and *Lotus corniculatus*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rare and limited to specific locations in Málaga. There are only two places where it can be seen at the moment, and only one of them is on the GMP, more precisely, on stage 11. There is a possibility that it can be spotted along stage 10 as well. It is greatly important to send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





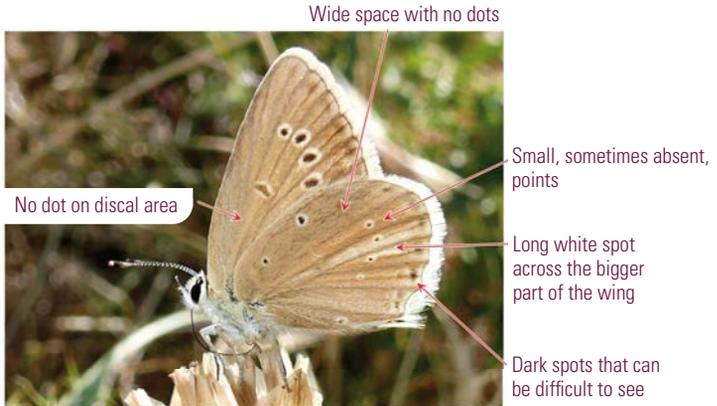
Andalusian Anomalous Blue

Polyommatus violetae (Gómez-Bustillo, Expósito & Martínez, 1979)

DESCRIPTION

Wingspan: From 2.4 to 3 cm. **Closed wings:** It is light brown with a white stretch across a big part of the hindwings. Sometimes, there also smaller dots on the same wings, and a wide space between two of them. Moreover, small spots on the outer margins can be seen, although not clearly on all butterflies. There is no dot on the forewings discal area. **Open wings:** It hardly ever stretches its wings. Both sexes are brown.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Due to its peculiar colour, a long white stretch across the wings and the lack of dots make it difficult to be confused with other species.

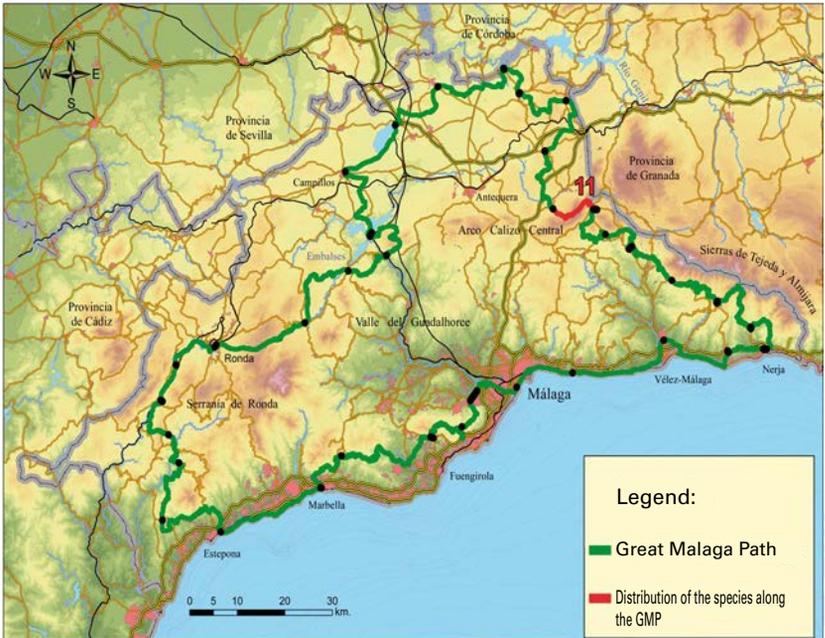
BIOLOGY AND HABITAT

These butterflies count on only one generation a year, which flies in July and August in mountainous areas at an altitude that ranges between and 1100 and 1650 m. They can be found in spacious areas in forests, on scrubland or pastures, and, very often, close to humid places such as streams, small lakes, drinking troughs and springs. Their caterpillars feed on leguminous plant called *Onobrychis argentea*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is an endemic species in Andalusia, which can only be found in the mountains of Málaga, Granada, Jaén, Albacete and Murcia. Its subspecies *violetae*, which is present in Málaga, is considered to be endangered species in 'Libro Rojo de los Invertebrados de Andalucía' [The Red Book of the Andalusian Invertebrates]. The species in question is rather rare and limited to specific locations in Málaga. There is no doubt, it is a real gem of the GMP regarding butterflies. It is present at a specific spot on stage 11. It is greatly important to report any information about spotting the species at any point along or outside of the GMP. Therefore, we recommend talking to the author of this guide about the data gathered during the observation.





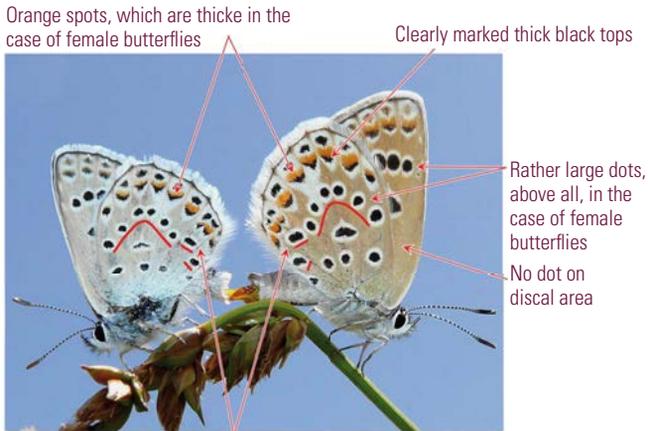
Escher's Blue

Polyommatus escheri (Hübner, 1823)

DESCRIPTION

Wingspan: From 2.8 to 4 cm. **Closed wings:** Their colour is greyish in the case of male butterflies, while females are brown. There are orange spots, which are thicker, outlined in black and pointed in the case of female butterflies. There is no dot in the discal area. There is a series of large dots, especially in the case of females, in the shape on an arch, which is broken by two joined dots that are separated from the rest so they all form a question mark. **Open wings:** This species can hardly ever be seen with stretched wings. Male butterflies are bright blue, while females are brown with a broad orange stretch that goes along the outer margins of the wings.

KEY FOR VISUAL IDENTIFICATION



Two joined dots that are separated from the rest so they all form a question mark



SIMILAR SPECIES

Southern Blue: It has a dot in the discal area, orange spots with black at the bottom which are larger than those the Escher's Blue has, and smaller dots. **Mother-of-pearl Blue:** It is light brown or whitish, and it has pointed orange spots with no black colour inside of them. **Chapman's Blue:** They have smaller dots. There are pointed orange spots without black colour on the point. **Spanish Chalk-hill Blue:** Male and female butterflies have small orange spots on the outer margins and a series of small dots on the hindwings, which does not exist on some butterflies. They have checked hairs (*fimbriae*) and a dot in the discal area. **Adonis Blue:** These butterflies have checked hairs, and a dot in the discal area.



Ícaro moro
Southern Blue



Niña de nácar
Mother-of-pearl Blue



Celda limpia
Chapman's Blue



Hembra
Female



Macho
Male

Niña andaluza
Spanish Chalk-hill Blue



Niña celeste
Adonis Blue

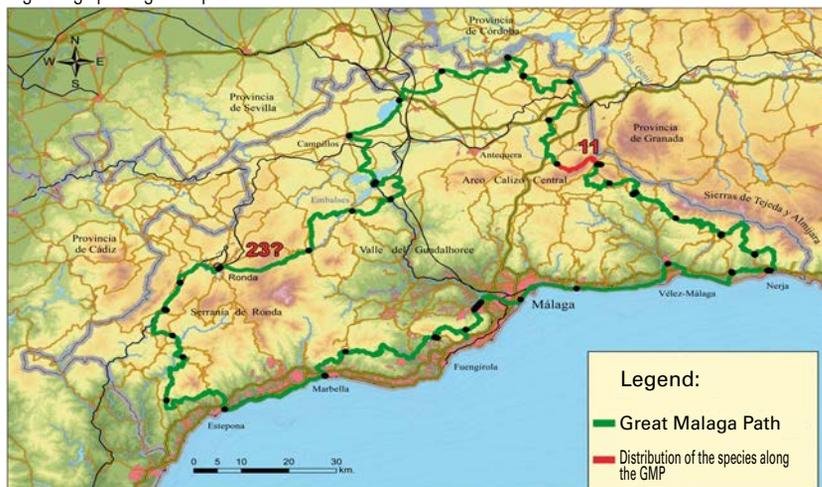
BIOLOGY AND HABITAT

Only one generation a year flies from the end of May to July. This species is commonly seen in the mountains at an altitude that ranges from 1050 to 1900 m. It usually lives in open areas, such as sparse forest or woodland, scattered thickets, bushes and grassland. Its caterpillars feed on short leguminous plants, above all *Astragalus incanus*, *Astragalus monspessulanus* and *Astragalus nevadensis*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

On Málaga, it is rare and limited to certain places. As for the GMP, it has only been seen at one place in the Arco Calizo Central, on stage 11. It might be present in higher areas along stage 23. We will appreciate if you report any information regarding spotting this species in this area.





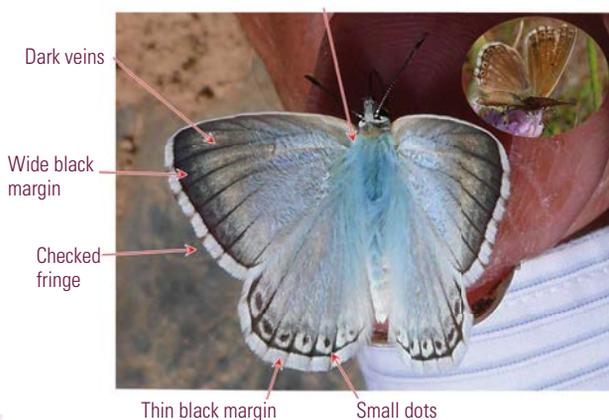
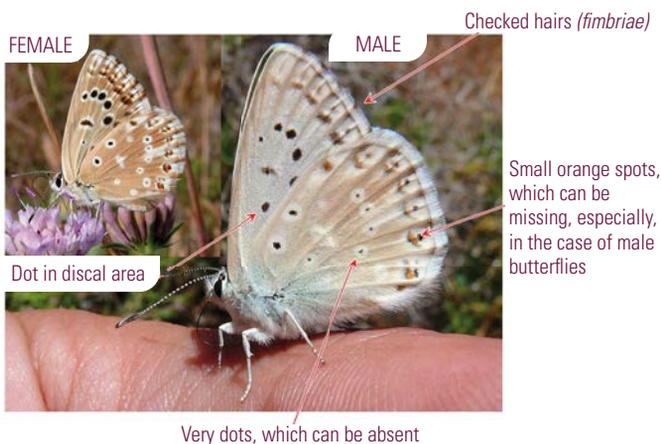
Spanish Chalk-hill Blue

Polyommatus albicans (Gerhard, 1851)

DESCRIPTION

Wingspan: From 2.8 to 4.2 cm. **Closed wings:** Their colour is creamy white in the case of male butterflies, while females are brown. Both sexes have checked hairs (*fimbriae*), a dot in the forewings discal area, small dots on the hindwings, which can be missing, especially, in the case of male butterflies. Some butterflies have small orange spots on the outer margins. **Open wings:** This species hardly ever stretches the wings. Male butterflies have sky blue body and the base of the wings. Their veins are dark. The forewings margins are wide and black, while the hindwings margins are thin with black dots. Female butterflies are completely brown, with whitish or orangey rings that stretch along the hindwings outer margins.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Southern Blue: Its orange spots are bigger and softly outlined in black inside at the bottom. **Mother-of-pearl Blue:** There is no dot in the discal area. It is light brown or whitish, and it has pointed orange spots. **Chapman's Blue:** There is no dot in the discal area. It has larger pointed orange spots. **Escher's Blue:** It has rather large dots. The dot is missing from the discal area. There are orange spots with black points. **Adonis Blue:** These butterflies have orange spots outlined in black, and larger dots.



Southern Blue



Mother-of-pearl Blue



Chapman's Blue



Escher's Blue



Adonis Blue

BIOLOGY AND HABITAT

There is one generation a year of this species that flies from June to September. They are especially common in July. These butterflies live in open mountains, and, occasionally, in degraded zones, such as esparto grass fields, some bushes, stony ground, sparse woodland and thicket. They can be found at an altitude between 700 and 1850 m. The caterpillars feed on leguminous plants that belong to *Hippocrepis* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is rare and limited to specific areas along the GMP. It can be found on the stages that go through the Tejeda and Almijara Mountains, the Arco Calizo Central, the north of the Province, and the Serranía de Ronda. There might be more of them in the northern area, as well as in the Genal Valley.





Adonis Blue

Polyommatus bellargus (Rottemburg, 1775)

DESCRIPTION

Wingspan: From 2.5 to 3.2 cm. **Closed wings:** Male butterflies are greyish or brown, and female brown. They have checked *fimbriae*. There is a dot in the forewings discal area. Large dots, out of which two are joined and separated from the rest, make a question mark. Orange spots are round and softly outlined in black. **Open wings:** They can hardly ever be seen resting with stretched wing. Both sexes have checked hairs (*fimbriae*). Male is bright blue, and female brown with orange spots on the outer margins.

KEY FOR VISUAL IDENTIFICATION



Two joined dots that are separated from the rest, making a question mark



Checked fringe

SIMILAR SPECIES

Southern Blue: Dots are smaller, and there are no checked hairs. **Mother-of-pearl Blue:** It is light brown or whitish, and without a dot in the discal area. The dots over it are smaller, and it has pointed orange spots. There are no checked *fimbriae*. **Chapman's Blue:** It does not have a dot in the discal area. The dots over it are smaller, and it has pointed orange spots. There are no checked *fimbriae*. **Escher's Blue:** The dot is missing from the discal area. It does not have checked fringe (*fimbriae*). **Spanish Chalk-hill Blue:** The dots on the hindwings are smaller. There are no orange spots or their size is smaller.



Ícaro moro
Southern Blue



Niña de nácar
Mother-of-pearl Blue



Celda limpia
Chapman's Blue



Fabiola
Escher's Blue



Niña andaluza
Spanish Chalk-hill Blue



Hembra
Macho
Adonis Blue

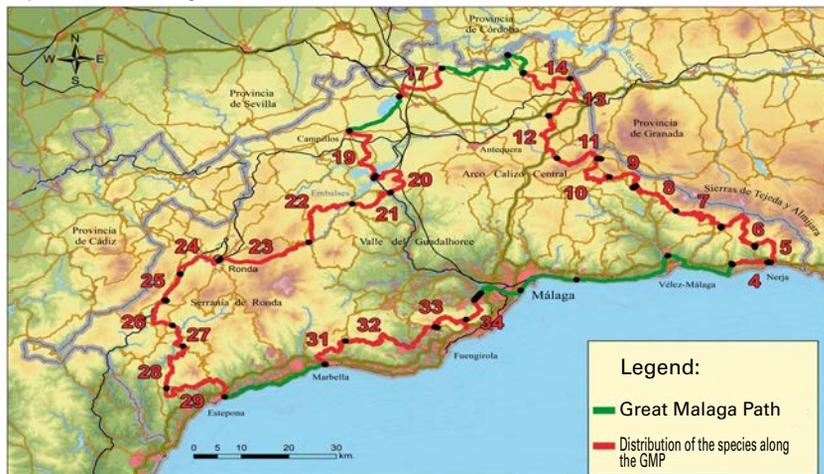
BIOLOGY AND HABITAT

Several generations fly throughout a year, above all from March to August. These butterflies prefer forests and well-preserved scrubland with grassland and pasture. They can often be found in less rugged areas at an altitude that goes up to 1300 m. These landscapes shelter their caterpillars' foodplants, leguminous plants that belong to *Coronilla*, *Anthyllis* and *Hippocrepis* families.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is rather present along the GMP, though in small numbers and at specific places. It is scarce on the stages that reach the coast and adapted areas in the north of the province. Nevertheless, there might exist traces of some populations at places with local vegetation.





Spanish Argus

Aricia morronensis (Ribbe, 1910)

DESCRIPTION

Wingspan: From 2.2 to 2.6 cm. The hindwings are rounded. **Closed wings:** They are brown with plenty of dots. A series of spots on the forewings is broken at the second dot which moves towards the inside. The first of the dots is smaller. The hindwings dots are gathered on the following way: first two are opposite one another; three of them are in a line (although the third can be smaller or missing), the last three are opposite each other; and the very last is composed of two dots so it seems longer. Moreover, there is another small dot which can sometimes be missing. On the forewing, there are vague orange spots, which are pointed on the hindwing, and the outer margin is softly outlined in black. Both of the wings sometimes have small dark spots behind the orange ones. **Open wings:** This species hardly ever stretches the wings. They are plain dark brown and have checked fringe (*fimbriae*).

KEY FOR VISUAL IDENTIFICATION

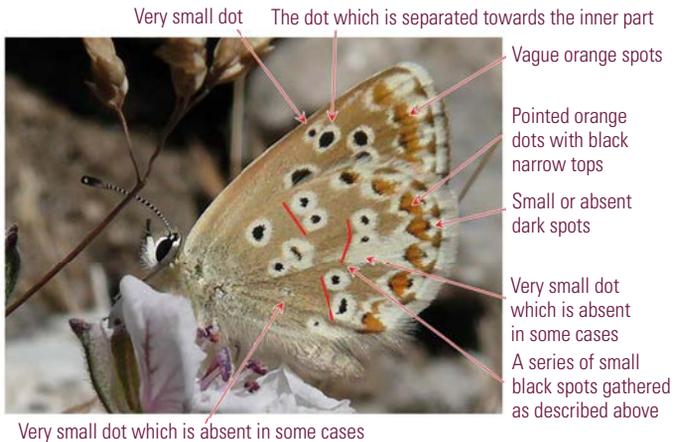


Photo: Rafael Obregón Romero

SIMILAR SPECIES

Southern Brown Argus and Mountain Argus:

There is no dot on the forewing, and the second one is in line with others. On both wings, the orange dots are bigger and the black dots are clearly marked. All dots are similar in size, and none of them is missing. The hindwings are rounded.



Morena
Southern Brown Argus



Morena serrana
Mountain Argus

BIOLOGY AND HABITAT

There is only one generation a year that flies at the end of June and in July in the Province of Málaga.

These butterflies live in high Málaga mountains, specifically, in the Tejada Mountains above 1700 m of altitude, in stony areas, bushes and pastures, around their foodplant *Erodium cheilanthifolium*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Considering their habitat, foodplant and the fact that none of the stages that belong to the path climb so high, this species is not present on the GMP. It is greatly important to report any information about the species spotted along the path to the author of this guide.





Southern Brown Argus

Aricia cramera (Eschscholtz, 1821)

DESCRIPTION

Wingspan: From 2.2 to 3 cm. **Closed wings:** They are brown with plenty of dots. These are perfectly aligned and form an arch on the forewing. The second dot on the hindwing is opposite the first one, while the rest of them, except one which on the inside, are aligned. There are orange spots on both wings outer margins. On the hindwing, they are sharp and black at the top. There are clearly marked black dots behind these spots. **Open wings:** Their background is brown, and there is a series of orange spots in a shape of a half moon on both wings.

KEY FOR VISUAL IDENTIFICATION



Very big orange spots with black tops, and sharp on the hindwings

Black dots behind orange spots on each wing

One spot opposite another

Spot which is closer to the inner part than the rest in a line



Series of orange spots in a shape of a half moon on both wings

SIMILAR SPECIES

Spanish Argus: This species has a smaller dot on the forewing, which cannot be seen in the case of the Southern Brown Argus. The second dot goes towards the inside and it is not aligned with the rest of the dots. The orange dots are smaller, and the dots behind them less clear. The hindwing is rounded and can miss some of the above dots. **Mountain Argus:** These butterflies are larger, lighter brown and their orange dots are smaller.



Spanish Argus



Mountain Argus

BIOLOGY AND HABITAT

They fly throughout the year, though they are more common and increase in number from May to July. There are several generations. The species is present in all kinds of habitats, from woodlands and bushes in high mountains, to uncultivated land and rural areas. Its caterpillars feed on different *Geraniaceae*, such as *Erodium cicutarium* and *Erodium malacoides*, as well as on the *Cistaceae* family plants from the *Helianthemum* genus and *Tuberaria guttata*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rather common in Málaga, where it can be found on all stages of the path, although it is rarer and limited to specific places in the north of the province, where it lives close to olive groves, and along the stages that go through towns on the coast, above all on the 1st stage.





Mountain Argus

Aricia montensis (Verity, 1928)

DESCRIPTION

Wingspan: From 2.4 to 3.1 cm. **Closed wings:** They are brown or creamy white with plenty of dots. These are perfectly aligned and form an arch on the forewing. The second dot on the hindwing is opposite the first one, while the rest of them, except one which on the inside, are aligned. There are orange spots on both wings outer margins. On the hindwing, they are sharp and softly outlined in black at the top. There are small dark dots behind these spots. **Open wings:** Their background is brown with a series of orange spots in the shape of a half moon on all wings. The spots fade little by little towards the apex on the forewings.

KEY FOR VISUAL IDENTIFICATION



Vague dark dots
behind orange spots

Sharp orange
spots with narrow
black tops

One spot opposite another

Spot that separates from the rest
towards the inner part



Orange spots fade
little by little
towards the apex

Orange spots in a
shape of a half
moon

SIMILAR SPECIES

Spanish Argus: This species has a smaller dot on the forewings, which cannot be seen in the case of the Mountain Argus. The second dot goes towards the inside and it is not aligned with the rest of the dots. The orange dots are smaller, and the dots behind them less clear. Some of the above dots do not appear on the hindwings. **Southern Brown Argus:** It is smaller, normally dark brown and has large orange spots.



Morena española

Spanish Argus



Morena

Southern Brown Argus

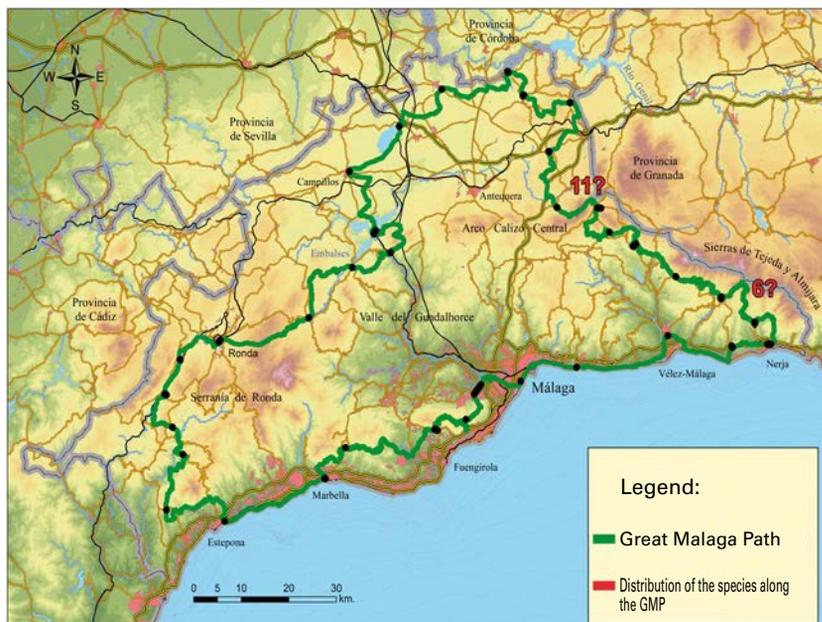
BIOLOGY AND HABITAT

This species is not common in Málaga, where it takes one generation a year to fly from July to August in the well-preserved mountainous areas, sparse woodland and scrubland. These caterpillars feed on the *Cistaceae* family plants that belong to *Helianthemum* genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is rare and lives at small number of places in Málaga. It can only be found in the high and medium-high Tejada Mountains. Their populations has not been spotted along the GMP, although they might exist at certain locations on high sections that belong to stages 6 and 11. It is greatly important to send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





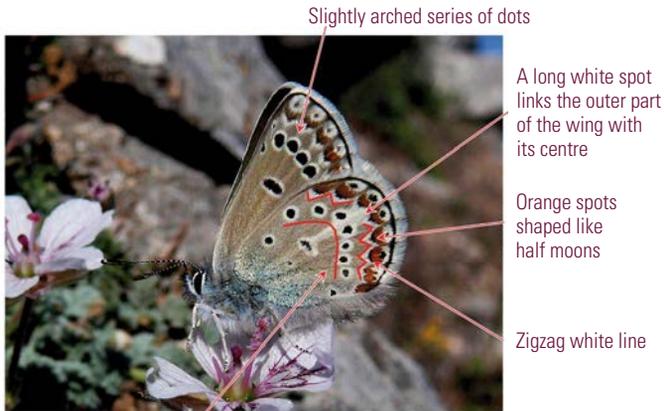
Geranium Argus

Eumedonia eumedon (Esper, 1780)

DESCRIPTION

Wingspan: From 2.6 to 3 cm. **Open wings:** They are light brown or greyish. On the forewing, there is a series of aligned dots which form a kind of arch. On the hindwing, there is another series of dots in a shape of an arch, as well as orange spots outlined in black and zigzag white line towards the inner part of wings, which look like half moon. A long white spot links the outer part of the wing with its centre. **Open wings:** It hardly ever rest with open wings. The background is brown with an orange stripe on the forewings, which appearance depends on a butterfly. Orange spots in the shape of an arch with a brown dot inside of them and a white arrow beneath are on the hindwing. The arrow is different depending on a butterfly.

KEY FOR VISUAL IDENTIFICATION



Arched series of dots



White or sky blue arrows



SIMILAR SPECIES

These perfectly aligned dots, the lack of a dot in discal area and the white spot which connects outer part with the centre of hindwings make this species unique.

BIOLOGY AND HABITAT

There is one generation a year, which flies from the end of May to the beginning of July, depending on the altitude. These butterflies live in medium-high or high mountains in Málaga, at an altitude that ranges between 1240 m and 2065 m, on open areas, such as stones and bushes, where their caterpillars' foodplant from *Geraniaceae* family, *Erodium cheilanthifolium*, can be found. Adult butterflies do not get far away from it neither.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is considered vulnerable in 'Libro Rojo de los Invertebrados de Andalucía' [The Red Book of the Andalusian Invertebrates], as there is a possibility of its extinction, but it is not protected by any law. It is limited to certain places in Málaga, such as middle-high areas in the Sierra de las Nieves, and the mountain ranges of Cabrilla, Chimenea, Torcal, Camarolos and Tejeda. None of the stages along the GMP is close to the places where the colonies of the *Geranium Argus* or its foodplant live. It is greatly important to send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





Silver-studded Blue

Plebejus argus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.4 to 2.8 cm. **Closed wings:** They are light grey or even white, something typical for the subspecies *Hypochionus*, which is present in Andalusia. There are orange arched spots, softly outlined in black towards the inner part of the wings, and big bright blue and black spots in the arches on the hindwings. The last but one dot from the series is separated towards the exterior. **Open wings:** They usually do not stretch their wings. Male butterflies are bright blue with thin black margins. This colour also stretches towards the inside thanks to the veins. Black dots can be seen on the hindwings outer margin. Female is brown with large arched orange spots on the margins of the wings, similar to those on closed wings.

KEY FOR VISUAL IDENTIFICATION



Large bright blue dots outlined in black

Arched orange spots with black tops facing the inner part of the wing

A dot which gets closer to the outer part of the wing



MALE

FEMALE

Black colour of margins extends through the veins

A series of black dots



SIMILAR SPECIES

When its wings are closed, the white parts, orange arches and bright blue colour make it unique.

BIOLOGY AND HABITAT

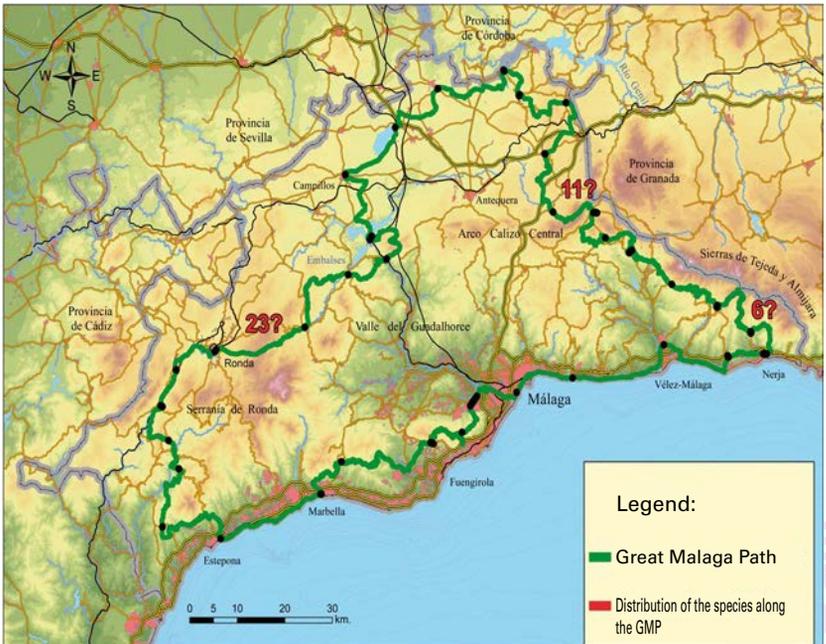
There is only one generation a year, which flies from June to July.

These butterflies are typical for medium-high and high mountains at an altitude between 1200 and 1850 m in Málaga. They always live in open zones, such as stony areas, bushes and pasture. The caterpillars feed on varied plants, such as leguminous plants that belong to *Lotus*, *Astragalus* and *Ulex* genus, and the family *Crassulaceae* from the genus *Sedum*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

In Málaga, this species is limited to certain places, such as the Sierra de las Nieves, and the Prieta and Tejada Mountains. None of its colonies has been spotted close to the GMP, but there might be some of them at specific locations on stages 6, 11, and 23.





Nettle Tree Butterfly

Libythea celtis (Laicharting, 1782)

DESCRIPTION

It is also known as the European Beak. Wingspan: From 3.5 to 4.4 cm.

Open wings: Brown with big orange spots and a whitish spot close to the front margin. All wings are sinuous, though forewings, which have an obvious protruding edge, are more prominent. The body and the base of the wings have greenish colour on them. **Closed wings:** They are greyish and brownish mottled with dark colour. Sinuous margins are more prominent on the forewing, which has a sharp edge under the apex, and white spots which cannot always be seen. On the hindwing, there is a lobe on the front margin and a white, thin and long line in the middle of the wing. These butterflies have rather protruding sensory organs, palpi, which come out of the head between antennae.

KEY FOR VISUAL IDENTIFICATION

Greenish body and the wings base

Whitish spot



Large orange spots on all wings

Sinuous margin with a protruding edge under the apex

Sinuous margin

A lobe on the margin

Prominent palpi



White spot

Sinuous margin with a sharp edge under the apex

Sinuous margin

Short thin line



SIMILAR SPECIES

Their peculiar figure, whenever the butterfly has closed or open wings, and the long palpi make it difficult to be confused with any other species.

BIOLOGY AND HABITAT

Adult butterflies live several months, counting on only one generation a year. They spend most of summer, autumn, and almost all winter, hibernating in order to start reproducing at the end of winter and beginning of summer. A new generation emerges at the end of spring and beginning of summer. Therefore, there are two good periods for watching them: in March and April, when they are worn out or injured if they survive winter, and in June, when the new generation emerges. They tend to scatter and migrate, so they can be seen in all kinds of habitats. However, they prefer forests and woods on the river banks, where their caterpillars' main foodplant, hackberry or nettle tree (*Celtis australis*) can be found. It can also be found around elm trees (*Ulmus minor*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Due to the great changes on the river banks, these butterflies, which must have been many in the past, are rare in Málaga. Nevertheless, as nettle trees are of special interest for Andalusian laws, the tree has been preserved and planted on river banks and parks and gardens, so the butterfly species in question should increase in number unless the trees in urban areas are treated with biocide. The species can be seen along the GMP, but only close to the rivers and streams where nettle trees grow, and it is rather rare. It does not exist on stages which go along the coast. As for the stages in the north of the province, it is scarcer, limited to some locations, or it does not exist on them. Nevertheless, due to their migratory character, they can appear at any stage where they have not been spotted yet.





Monarch

Danaus plexippus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 8.6 to 10.2 cm. **Open wings:** They are orange and black, with black scales over veins, which makes it wide and striking. The apex and the margins are black with a lot of white dots, which are aligned in two rows on the hindwings. The body is black with white dots. **Closed wings:** Their design is similar to the above one, but the orange colour is fainter, there is less black colour on the apex, and there are more orange spots.

KEY FOR VISUAL IDENTIFICATION

Black body and head with white dots



Wide black veins

Wide black margins with plenty of white dots

Wide orange stretches between the veins

Similar design to the above one, but the orange colour is fainter



SIMILAR SPECIES

Plain Tiger: It is smaller. With open or closed wings, and it has more orange colour on it, as its veins are not black.

The apex on the forewings has large white spots, while the outer margins of both, hind and forewings, have only one row of white dots.



BIOLOGY AND HABITAT

In Málaga, several generations exist at the same time, and fly throughout the year, above all at the end of autumn.

Due to their migratory character, Monarchs can be seen at any kind of habitat, from urban areas, where they breed, to the mountains in the inland, which they just visit. Their caterpillars' foodplant is bloodflower (*Asclepias curassavica*), which came from the USA, and it has been used for decorating parks and gardens. It naturalized in several locations in Málaga, such as Marbella, relatively close to the GMP, and it shelters some of the major Monarch's colonies which are known in Andalusia.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Due to their migratory character, these butterflies can be seen at any point of the trail, dozens of kilometres away from their young colonies. There are no colonies on the GMP, but it is rather common on stage 30 as its large colony in Marbella is close to it. When the year is good for the species regarding the weather, it can also be seen on stages 32, 33 and 34 because the butterflies come from varied colonies on the coast, spread between Marbella and Benalmádena. During some extraordinary favourable years, like 2016, it can even be seen in the Serranía de Ronda. In particular, it was spotted on stage 24 of the GMP, among many other places.





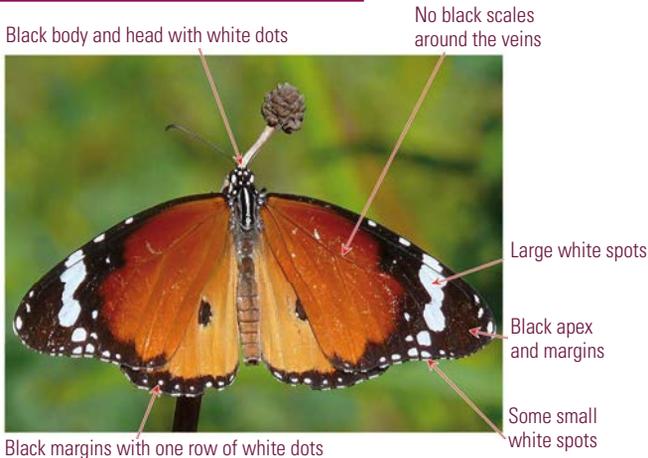
Plain Tiger

Danaus chrysippus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 7.5 to 9 cm. **Open wings:** Their background is orange, without veins covered in scales, so orange colour is rather prominent. The forewings apex is black with large white spots, and there are black margins and one row of white dots on the hindwings. The hindwings margin is black with one row of white dots. The body is black with white dots. **Closed wings:** Their design is similar to the above one, but the orange colour is fainter, and the apex is orange instead of black. Wings veins are covered in white scale, and have several black spots in the middle of the hindwings.

KEY FOR VISUAL IDENTIFICATION



Similar design to the above one, but the orange colour is fainter



White scales outline the veins

Black spots

SIMILAR SPECIES

Monarch: It is bigger. With open or closed wings, and it has less orange colour on it, as its veins are black. The apex on the forewings does not have large white spots, while the outer margins of both, hind and forewings, have two row of white dots.



BIOLOGY AND HABITAT

In Málaga, the only colony we know for is the one that lived in Marbella from 2009 to 2010, and this very year in December as caterpillars. Before and after that, the species was not present in the province. The only place where it was seen is the same where the biggest Monarch's colony exist. This is a river bed, which is dry almost all year long, and has plenty of bloodflowers (*Asclepias curassavica*), which are host plants for their caterpillars.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

They have not been seen on the GMP. As these are migratory butterflies, they can create new colonies at the places they disappeared from, so they might be seen along stage 30.

It is greatly important to send any information about spotting the species on or away from the GMP to the author of this guide.





Large Wall Brown

Lasiommata maera (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.8 to 5.2 cm. **Open wings:** The forewings are orange with lines and brown margins. The inner part of the wings in the case of male butterflies is off-orange colour and has a line which goes across it towards the apex (androconia). This striking line does not exist in the case of female butterflies. There is a large black eyespot or an eyelike marking, called *ocellus*, with a white dot in the centre and one more under it, which is similar but much smaller. Another dot is close to the apex. On the hindwings, the inner part is brown, while the margins have a series of black eyespots with white centre and orange outline. **Closed wings:** They are silver grey coloured with the eyespots which are similar to those on the open wings. On the hindwings, there are also eyespots in different sizes with concentric rings.

KEY FOR VISUAL IDENTIFICATION

The inner part of the wings in the case of male butterflies is off-orange colour



A series of eyespots surrounded by orange rings

Brown inner part of the wings

Small white eyespot surrounded by thin black ring

Black eyespot with a white dot in the centre and one more under it

Brown line (androconia)

A series of eyespots surrounded by orange rings



A series of outlined eyespots in different sizes

SIMILAR SPECIES

Wall Brown: When it opens wings, this species has only one rather small eyespot on the forewing apex.

Males butterflies androconia is bigger and more prominent. All across the hindwing, there is a long orange spot, over a series of eyespots. When its wings are closed, they are grey mottled with brown. There is a series of eyespots, which are similar in size, and have concentric rings.

Speckled Wood: It has sinuous wings margins. When it stretches the wings, there are more brown sections on them, so orange parts are reduced to spots. There is only one eyespot at the apex and it is smaller. On the hindwing, we can see an orange spot above a series of eyespots that goes across the middle of the wing up to the outer margin. When its wings are closed, there are various differences between this species and the Large Wall Brown. Firstly, they are completely brown, without eyespots on the hindwing, which are reduced to small white spots.



Wall Brown



Speckled Wood

BIOLOGY AND HABITAT

The species counts on two annual generations, which fly at the same time and continuously from February to November. They mainly emerge in May, June and July.

These butterflies live on open habitats, such as sparse woodland and scrubland. They can usually be found at areas with stones, esparto grass, bushes and gorse. Their caterpillars feed on different genera of grasses, such as *Agrostis*, *Festuca* and *Holcus*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species has been spotted at most of GMP stages which go through rugged areas, though in small numbers and at limited locations.





Wall Brown

Lasiommata megera (Linnaeus, 1767)

DESCRIPTION

Wingspan: From 3.5 to 5 cm. **Open wings:** The forewings are orange with brown margins. On male butterflies inner part of the wings, there is a bold orange line which goes across the wing towards the apex (androconia), which does not exist in the case of female butterflies. There is a black eyespot in the centre. On the hindwings margins, a series of black eyespots with white centre and orange outline can be seen. There is a brown line above them, and, over it, a long orange spot which goes across the entire hindwing. **Closed wings:** They are grey sprinkled with brown colour. On the forewing, there is one very small eyespot, which is occasionally missing, above the ocellus on the apex. The hindwing has a series of eyespots in similar size with concentric rings.

KEY FOR VISUAL IDENTIFICATION



A series of black eyespots with white centre and orange outline

The black ocellus and another very small eyespot, which is occasionally missing, above it



SIMILAR SPECIES

Large Wall Brown: When it stretches the wings, there is a big eyespot on the forewing apex, a smaller one next to it, and one more close to the apex. Male butterflies' androconia is thinner. On the hindwing, there is no long orange dot over the series of eyespots. When its wings are closed, they are silver grey. There is a series of eyespots, which are different in size, and have concentric rings. **Speckled Wood:** It has sinuous wings margins. When it stretches the wings, there is more brown colour on them, so orange parts are reduced to spots. There is only one eyespot at the apex and it is smaller. On the hindwing, we can see an orange spot above a series of eyespots that goes across the middle of the wing up to the outer margin. When its wings are closed, there are various differences. Firstly, they are completely brown, without eyespots on the hindwing, which are reduced to small white spots.



Large Wall Brown



Speckled Wood

BIOLOGY AND HABITAT

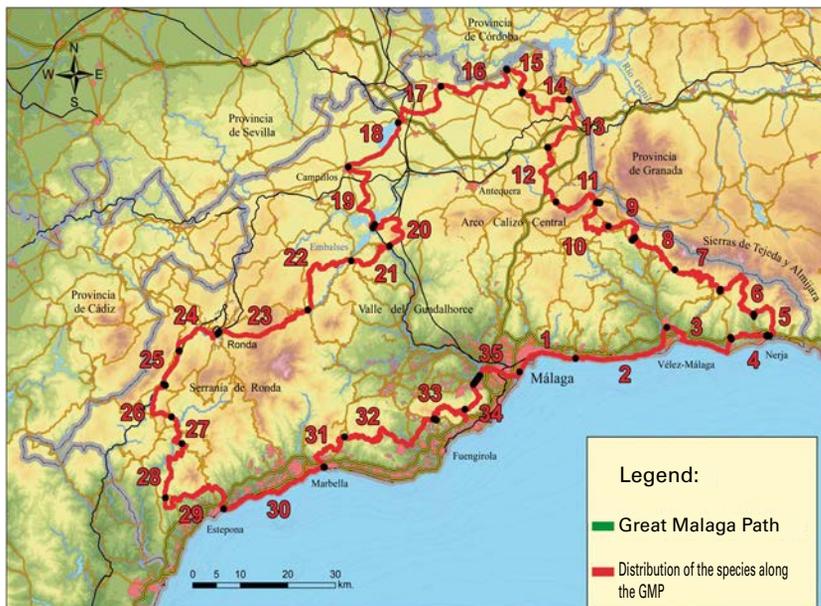
This species flies throughout the year, above all from March to July. There are three generations which are active at the same time, and their emergence period is long. Therefore, it is possible to spot recently emerged butterflies on nice winter days.

They are present in all types of habitats covered in plants, from lower areas and steep slopes to open woodland, scattered thickets and high mountains. They often exhibit hilltopping. Their caterpillars feed on varied grasses, such as the genera *Aegilops*, *Stipa*, *Poa* and *Brachypodium*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This one is probably the most common butterfly from the Nymphalidae family in the province. It can be found at all stages of the path, but it is rarer the case of coastal areas and in the north of the province, where it can be found at limited number of places.





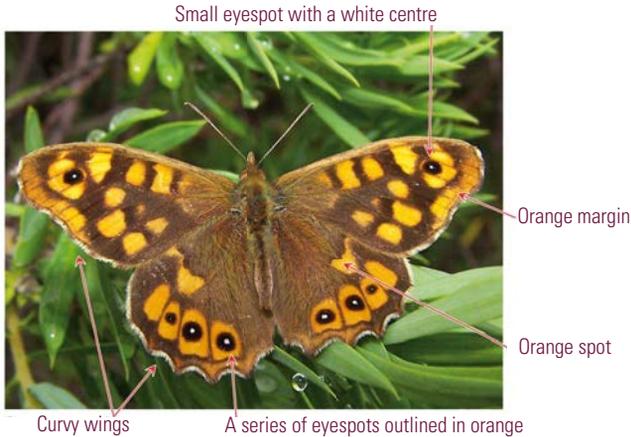
Speckled Wood

Pararge aegeria (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.5 to 4.4 cm. Both wings are curvy, though the sinuous outlines are more prominent on the hindwing. **Open wings:** They are mostly brown with some scattered orange spots. On the forewing, there is a small eyespot with a white centre on the apex. Orange margins stretch from the apex to the proximity of the anal angle. On the hindwing, an orange spot spreads to the middle of the wing, above the series of eyespots. **Closed wings:** The hindwing is covered in different shades of brown. There is a series of white spots outlined in vague brown which represent traces of eyespots.

KEY FOR VISUAL IDENTIFICATION



A series of white spots outlined in vague brown as traces of eyespots

SIMILAR SPECIES

Large Wall Brown: The wings outlines are not sinuous. When it stretches the wings, there is a big eyespot on the forewing apex, a smaller one next to it, and one more close to the apex. The section of margin between the apex and the anal angle is brown. On the hindwing, there is no long orange dot over the series of eyespots. When its wings are closed, they are silver grey. There is a series of black eyespots with concentric rings. **Wall Brown:** The wings outlines are not sinuous. All wings are more covered in orange than in brown colour. The section of forewing margin between the apex and the anal angle is brown. An orange spot, placed over the series of eyespots, goes across the entire hindwing. When its wings are closed, they are grey. There is a series of black eyespots with concentric rings.



Large Wall Brown



Wall Brown

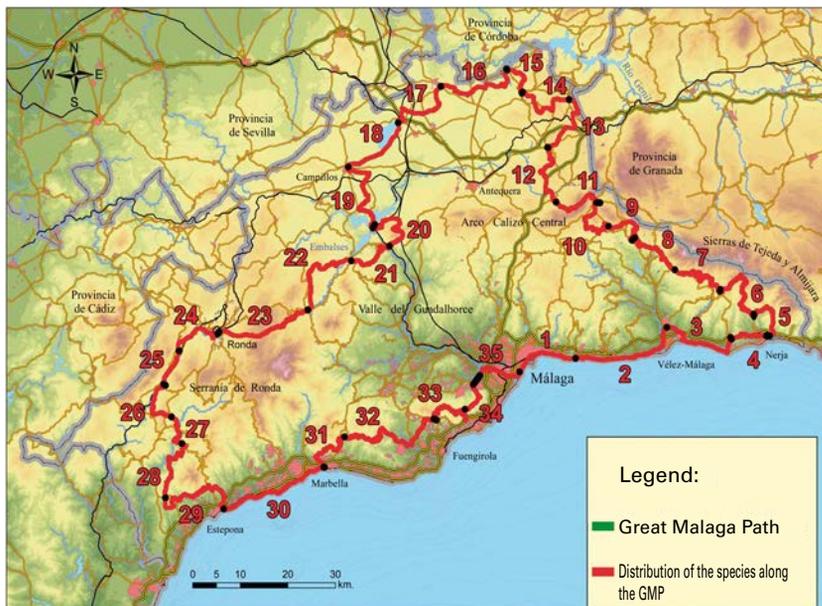
BIOLOGY AND HABITAT

Several generations fly throughout the year at the same time. It is more common from March to July. Recently emerged butterflies can be seen on warm winter days. This species lives in all kinds of habitats covered in plants, above all away from sunny zones, in shady areas, dense forests, such as eucalyptus woods, river banks with trees, streams and cattle tracks. Its caterpillars feed on diverse grasses, such as the genus *Elymus*, *Brachypodium*, *Poa* or *Dactylis*.



DISTRIBUTION

This species can be seen all along the GMP, although, on the coast and in the north of the province, it is scarcer and limited to specific places.





Dusky Heath

Coenonympha dorus (Esper, 1782)

DESCRIPTION

Wingspan: From 2.5 to 3.4 cm. **Closed wings:** They are light brown, or cream-coloured. There is a large eyespot surrounded by orangey or brownish ring on the forewing apex. Sometime, there is also a small eyespot in the lower part. On the hindwing, a series of eyespots can be seen close to the outer margin. One of them is separated from the rest by a whitish stretch. Both wings have a silver line that stretches across them. **Open wings:** This species hardly ever stretches its wings. The male butterflies forewing is brown, while the hindwing is orangey. Female butterflies have only orangey wings. In both cases, some eyespots can be seen.

KEY FOR VISUAL IDENTIFICATION

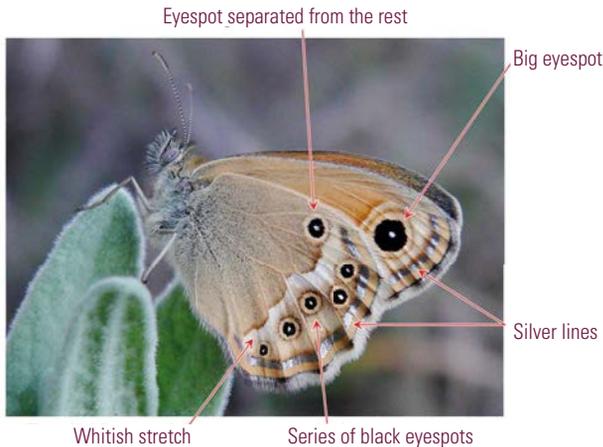


Foto: Rafael Obregón Ronero



SIMILAR SPECIES

Their colour, silver lines and the series of striking eyespots make them impossible to be confused with other species.

BIOLOGY AND HABITAT

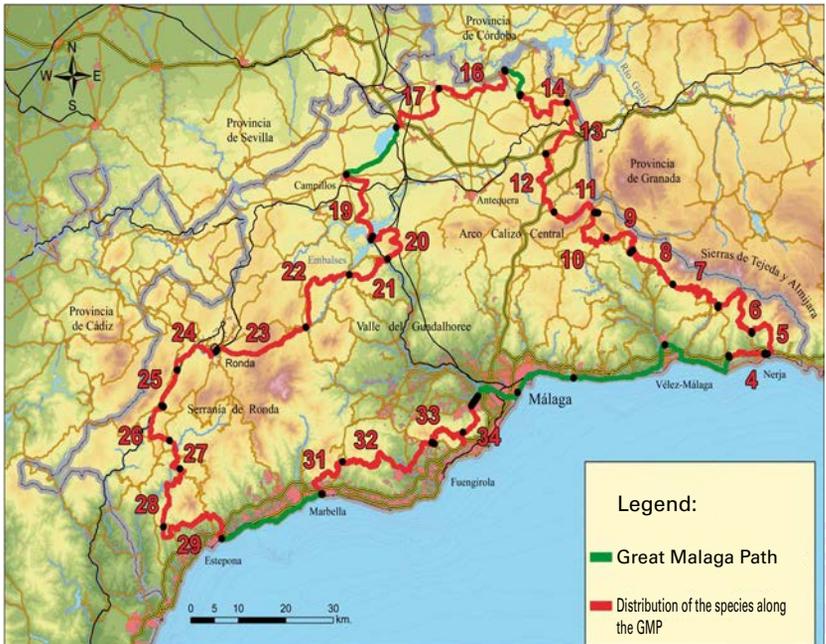
They fly from May to September, though they are the most common in July and August.

They love heat, and live in mountainous areas which are dry and sunny. You can see them at stony places, or those with scattered thickets and esparto grass, as well as in olive groves with little biocide. Their caterpillars feed on grass plants, such as *Aegilops*, *Brachypodium*, and *Stipa* genus, as well as on the *Carex halleriana*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found at almost all stages of the GMP to a greater or lesser extent, but at the limited number of places. It is not present on the coast and on some stages in the north of the province.





Small Heath

Coenonympha pamphilus (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 2.4 to 3.4 cm. **Closed wings:** Male butterflies hindwings are brown-grey and hairy, while females are creamy-coloured and they are not hairy. Both sexes have orange forewings with the margins covered in the same colours as the hindwings. Moreover, there is a small eyespot on the forewings apex, while the hindwings have a series of vague and hardly visible eyespots. In the middle of these wings, there are dark spots, from which continue another lighter stains. **Open wings:** This species never rest with stretched wings. They are orange with brown margins and two visible eyespots. One of them is on the forewing apex and the other close to the hindwing anal angle.

KEY FOR VISUAL IDENTIFICATION

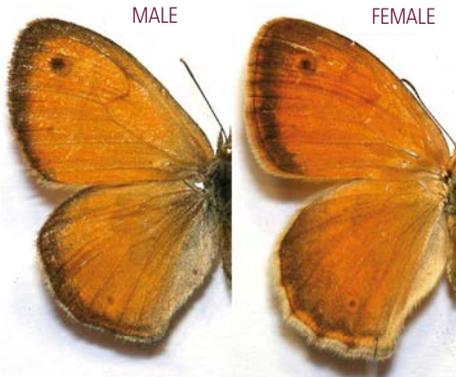
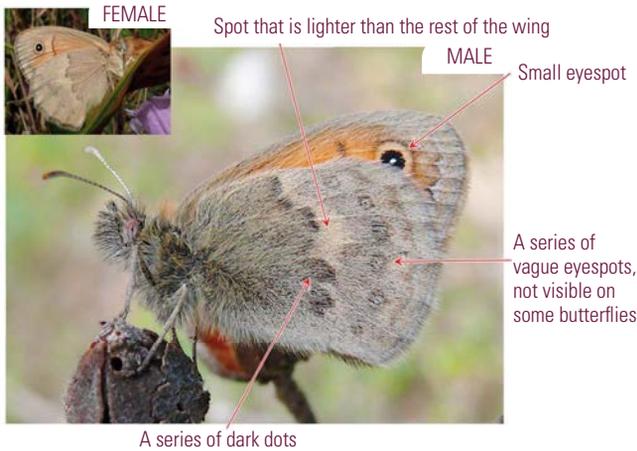


Photo: Rafael Obregón Romero

SIMILAR SPECIES

Female butterflies can be confused with the Gatekeeper, which is yellowish and mottled. There is a double eyespot on the forewing, as well as the series of prominent eyespots, which make groups of two and three. A bright stretch separates them one from another.



BIOLOGY AND HABITAT

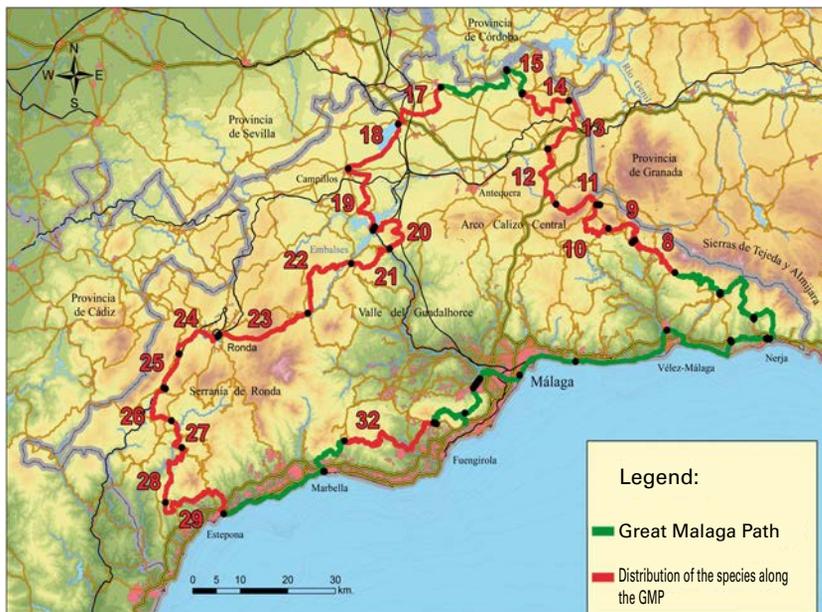
There are two generations a year that fly throughout the year, above all from March to July.

The species lives in open and flat areas, or those which are not very steep, such as rural surroundings, uncultivated land, grassland, pasture, olive and almond groves, where little amount of biocide was used. It is scarcer and limited to certain locations in mountainous surroundings, where it is restricted to sparse woodland and scattered thickets. Its caterpillars feed on grass plants that belong to, for example, *Festuca*, *Poa* and *Dactylis* genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is common in grassy habitats, but, strangely, it cannot be found in coastal areas in the province. As for the GMP, it also exists on almost all inland stages, except those close to the coast and in the Almijara and Tejada Mountains.





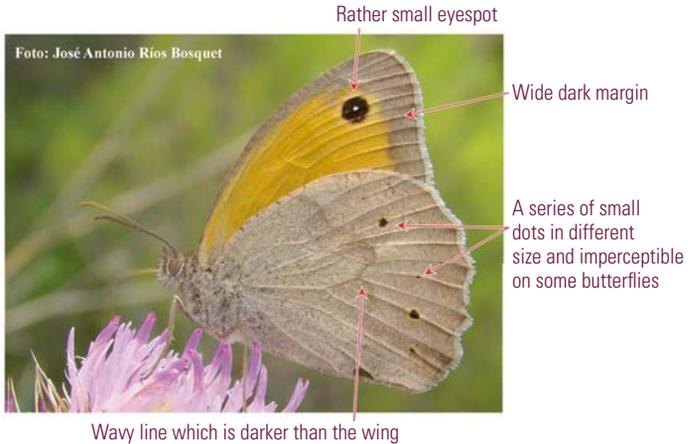
Meadow Brown

Maniola jurtina (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.6 to 5.2 cm. **Closed wings:** The hindwing is brown-grey. It has a series of black dots in different sizes, which can sometimes be missing from the wings. There is a darker wavy line in the middle of the wing that extends along it. Behind it, there is a cream stretch on some butterflies. The forewing is orange with the margins covered in the same colours as the hindwings. There is also a black eyespot, which is smaller than in the case of other species. **Open wings:** It hardly ever shows its open wings. Male butterflies are dark brown, with a large dark stain in the centre of the forewing (androconia). On the same wing, there is a small black eyespot with an orange ring around it. Females have a bigger eyespot, and, under it, another smaller one can be seen on some butterflies. There are orange stretches on hindwings and forewings.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Dusky Meadow Brown: It is rather similar to the Meadow Brown, but the eyespot on the forewing is larger. The hindwings are more greyish, with a wide stretch that goes from the curvy line in the middle to the outer margin, and it is brighter than the rest of the wing. The outer margin is sprinkled with brown and orange and without dots, except the one at the anal angle, which is not always visible. **Oriental Meadow Brown:** It is completely grey, and mottled with black. The hindwing does not have a wavy line nor dots.



Dusky Meadow Brown



Oriental Meadow Brown

BIOLOGY AND HABITAT

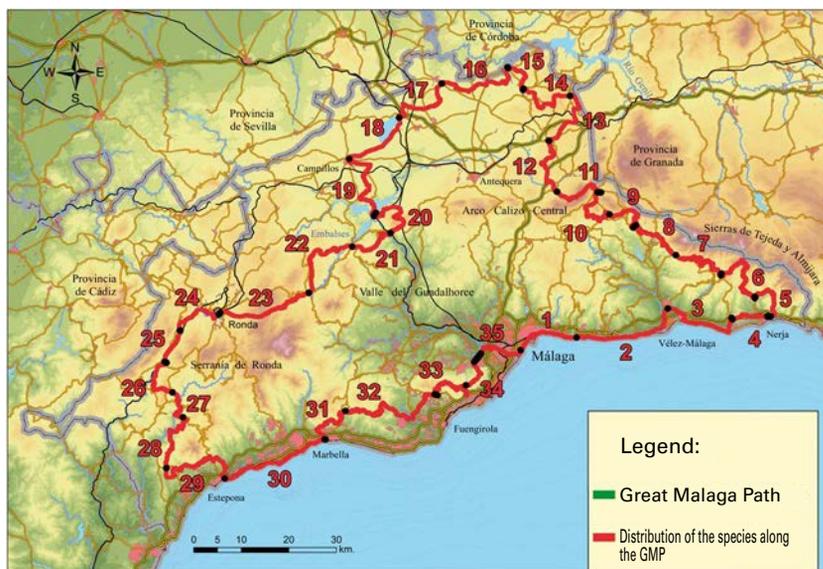
It flies from April to October, counting on only one generation a year, but the emergence period is rather long. Some butterflies can be even seen emerging in autumn in lower areas and close to the coast. Most on them fly from May to July.

These butterflies are present in all kinds of habitats, including woodland and scrubland, as well as rural and adapted areas, where they are fewer. When it is hot, they like resting in the shade, on the ground or on lower parts of bushes. Their caterpillars feed on grass plants, such as esparto (*Stipa tenacissima*) and the following genera: *Poa*, *Elymus* and *Brachypodium*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species can be seen all along the GMP, although, on the coast and in the north of the province, it is scarcer and limited to specific places.





Gatekeeper / Hedge Brown

Pyronia tithonus (Linnaeus, 1771)

DESCRIPTION

Wingspan: From 3.4 to 4.2 cm. **Closed wings:** The male butterflies hindwing is yellow and mottled. It has a series of brown eyespots with vague borders, which split in groups of two. The group are separated by a light stretch. The forewing is orange with yellow margins, and a double eyespot in the shape of an eight.

Open wings: They do not often rest with stretched wings. Both sexes are orange with broad brown margins and a double eyespot in the shape of an eight. Female butterflies have a small white dot close to the anal angle on the hindwings. Male butterflies have a brown spot (androconia) in the centre of the hindwing.

KEY FOR VISUAL IDENTIFICATION



A double eyespot in the shape of an eight

Lighter zone

A series of vague brown eyespots

A double eyespot in the shape of an eight



FEMALE

Wide brown margins

Very small white dot

MALE

SIMILAR SPECIES

Small Heath: It can be only confused with female butterflies, but it has less yellow colour on it, and it is not mottled. It lacks double eyespot on the forewing apex and the series of eyespot is less prominent and entire, not broken. When the Gatekeeper's wings are open it can be confused with, **the Southern Gatekeeper**, but its female butterflies lack a small dot on the hindwing and the male androconia is clearly lined by veins; and **the Spanish Gatekeeper**, though both sexes have a series of eyespots on the hindwings.



Small Heath



FEMALE

MALE

Southern Gatekeeper



MALE

FEMALE

Lobito listado
Spanish Gatekeeper

BIOLOGY AND HABITAT

This species counts on only one generation a year, which is active from June to August, especially in July. It flies in well-preserved mountainous areas, sparse woodland, scattered thickets, grassland and pasture. It can often be found on the ground which is humid most time of the year, such as springs, water tanks, drinking trough and streams, where mineral salts can be seen on the ground, or flying, resting or drinking on blackberries flowers. Its caterpillars feed on grass plants that belong to, for example, *Festuca*, *Poa* and *Dactylis* genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rather rare and lives at specific places in Málaga. As for the GMP, we only know it exists, and that it is limited to stage 11. It might be found at stages 6, 9 and 23 as well.





Southern Gatekeeper

Pyronia cecilia (Vallantin, 1894)

DESCRIPTION

Wingspan: From 3 to 3.6 cm. **Closed wings:** The hindwing is grey and rather marked with brown colour. A large section of the wings is white, and forms a Y, and we can see a bulk on their inner part. The forewing is orange, with a double eyespot and a wide grey and brown margin. **Open wings:** They usually do not stretch their wings. Both sexes are orange with broad brown margins and a double eyespot in the shape of an eight. Female butterflies do not have a small white dot close to the anal angle on the hindwings. Male butterflies have a brown spot (androconia) in the centre of the hindwing, which is clearly lined by orange veins.

KEY FOR VISUAL IDENTIFICATION

A double eyespot in the shape of an eight



Wide grey and brown margin

A large white section in the shape of a Y

Bulk on the inner part

A double eyespot in the shape of an eight

HEMBRA

MACHO



Wide brown margins

No black dot



SIMILAR SPECIES

When the Gatekeeper's wings are open it can be confused with **the Gatekeeper**, but its female butterflies have a small dot on the hindwing and the male androconia is not clearly lined by veins; and **the Spanish Gatekeeper**, though both sexes have a series of eyespots on the hindwings.



MALE Gatekeeper



FEMALE MALE Spanish Gatekeeper FEMALE

BIOLOGY AND HABITAT

It flies from May to September, but it is more frequent during the first three months. There is only one generation a year.

It lives in open habitats, such as woodland and scrubland, olive and almond groves, and it is more common in those locations which have plenty of grass plants and are not too rugged. Actually, its caterpillars feed on grasses, above all on the genus *Brachypodium*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

As for the GMP, this species is everywhere but on the coast. However, on stages 3 and 4, it is scarcer and limited to certain places, the same as in the north of the province.





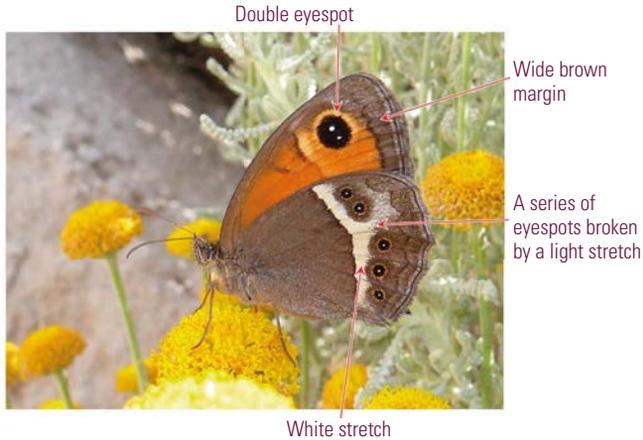
Spanish Gatekeeper

Pyronia bathseba (Fabricius, 1793)

DESCRIPTION

Wingspan: From 3.4 to 4 cm. **Closed wings:** The hindwing is brown, and a white stretch which goes across it. Behind it, there is a series of eyespots, which is broken by a light stretch. The forewing is orange, with a double eyespot and a wide grey and brown margin. **Open wings:** This species hardly ever stretches the wings. Both sexes are orange with broad brown margins in the shape of an eight, although sometimes male butterflies miss one of the white dots in the centre. There is a series of eyespots on the hindwings. Female butterflies have larger orange sections, as the androconia covers a big part of male wings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

When it stretches the wings, it can be confused with **the Gatekeeper** and **the Southern Gatekeeper**, but both of these species miss a series of the eyespots on the hindwing, among other differences.



MALE Gatekeeper FEMALE MALE Southern Gatekeeper FEMALE

BIOLOGY AND HABITAT

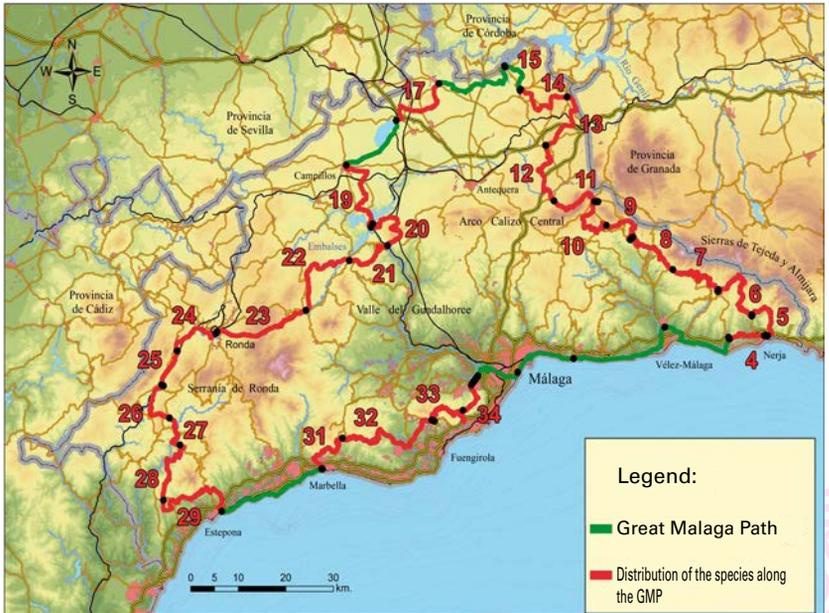
There is only one generation which flies from March to September, something which depends on the altitude of the place. They are more active in May and June.

It is common and rather numerous in forests and woodland. In dense forests, it looks for clear areas, such as paths or forest tracks. At midday, when it is rather hot, it rests in shady areas. There can be dozens of butterflies resting or drinking on the flowers of the *Helychrisum stoechas* or *Teucrium lusitanicum*. Nevertheless, these are not its caterpillars' foodplants, but gramineous plants, or grasses, such as Mediterranean False-brome (*Brachypodium retusum*) and Purple False-brome (*Brachypodium phoenicoides*), or Rough Meadow-grass (*Poa trivialis*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is rather common along the GMP, especially along the stages with wide forests. It cannot be seen on the coastal stages and in more decaying stretches in the north part of the province, which do not go through woods or forests.





Dusky Meadow Brown

Hyponephele lycaon (Kühn, 1774)

DESCRIPTION

Wingspan: From 3.5 to 4 cm. **Closed wings:** The hindwing is grey and a little mottled. There is a wavy dark line with shades of orange, and a light stretch behind it. Some orangey or brownish spots can be seen on the hindwing margin. A small dot, which is sometimes not visible, is placed at the anal angle. On the forewing, we can see a big eyespot on the apex, margins of the same colour as the hindwing and orange inner part. **Open wings:** This species hardly ever stretches its wings. Male butterflies are brown with two small eyespots on the forewing and a not really prominent andocronia. Female butterflies have bigger eyespots with wide orange spots around them. The hindwing is brown.

KEY FOR VISUAL IDENTIFICATION

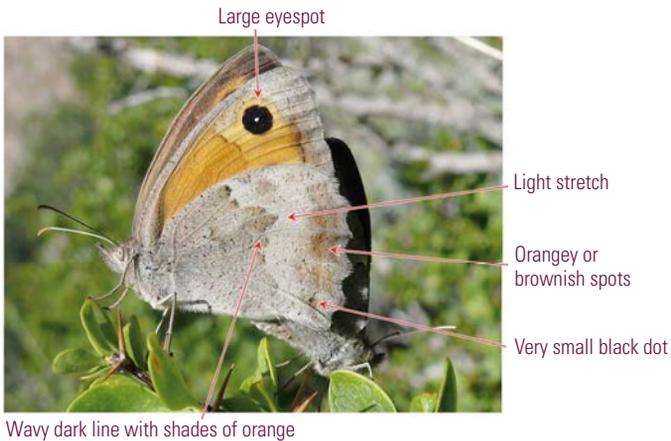


Photo: Rafael Obregón Romero



SIMILAR SPECIES

Meadow Brown: It is rather similar, but bigger and less mottled. It has more brown sections. There is a series of black spots along the hindwing outer margin, which has no orange spots over itself.
Oriental Meadow Brown: It is completely grey, and mottled with black. The hindwing does not have a wavy line nor a dot at the anal angle.



Meadow Brown



Lobito anillado

Oriental Meadow Brown

BIOLOGY AND HABITAT

They take one generation a year to fly, above all, in July in mountainous surroundings, between 850 m and 1900 m of altitude. It can often be found in open stony areas, with scarce and scattered vegetation, sunny and dry zones, such as oak and pine forests in bad conditions if their caterpillars' foodplants, grasses that belong to the genera *Stipa*, *Bromus* and *Festuca*, live in the area.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Only one generation of this species has been spotted along the GMP, specifically, on stage 11, where it is rare and limited to specific locations. There is a possibility that it appears at some other places in the Arco Calizo Central, the Almijara Mountains or the Serranía de Ronda.





Oriental Meadow Brown

Hyponphele lupinus (Costa, 1836)

DESCRIPTION

Wingspan: From 3.6 to 4.2 cm. **Closed wings:** The hindwing bears one shade of grey and it is very mottled, without a wavy line in the middle nor a series of dots. The forewing is orange, and its margins are similar colour as the hindwing with a small eyespot. **Open wings:** This species hardly ever stretches the wings. Male butterflies are brown with two small eyespots on the forewing and a prominent andocronia. Female butterflies have larger eyespots and a wide orangey ring around each one of them.

KEY FOR VISUAL IDENTIFICATION

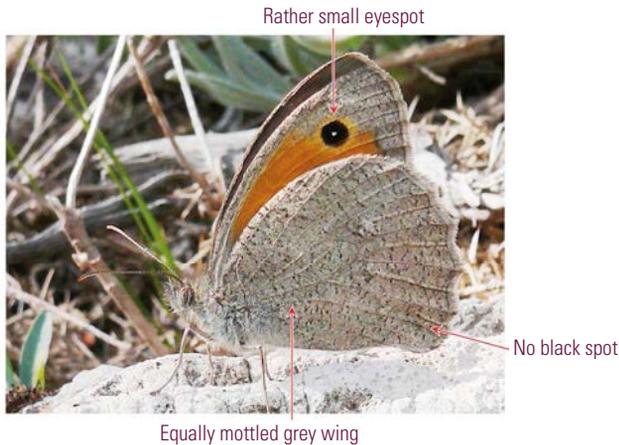


Photo: Rafael Obregón Romero



SIMILAR SPECIES

Meadow Brown: It is a little bigger, and less grey. It has the wavy line and a series of black spots along the hindwing outer margin. **Dusky Meadow Brown:** The eyespot is larger. It has a wavy line in the middle, and different colour shades on the wings. The hindwing outer margin is mainly orange and there is a small spot at the anal angle, which is not always visible.



Meadow Brown



Dusky Meadow Brown

BIOLOGY AND HABITAT

This species flies at the end of June and July in the mountains which are between 1150 m and 1800 m high. It prefers sunny and dry pasture, or stony places with scattered thickets. Its caterpillars feed on grass plants that belong to, for example, *Stipa* and *Aegilops* genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the rarest and the most limited species in Málaga. It has never been spotted along the GMP, but it may exist in high areas on stages 11 and 23. It is greatly important to send any information about spotting the species to the author of this guide.





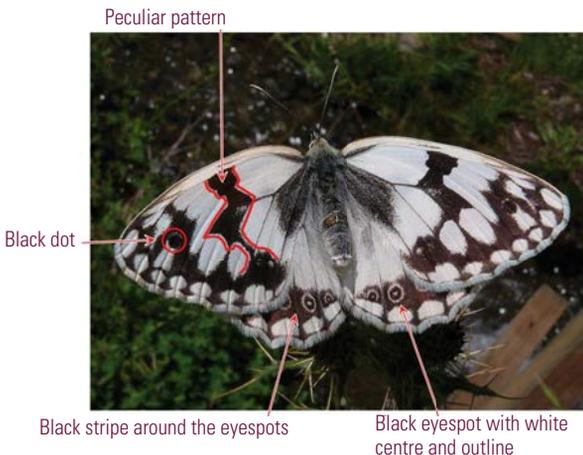
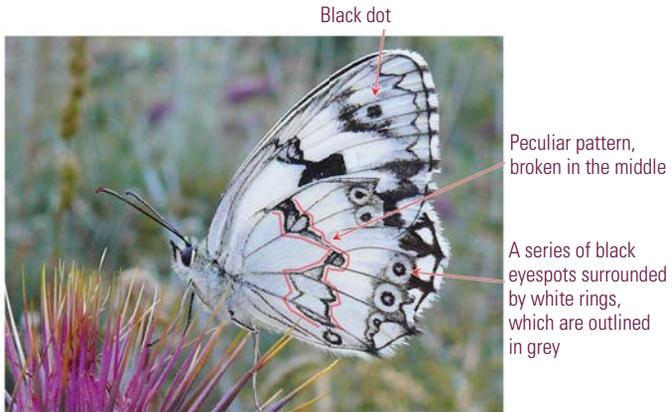
Iberian Marbled White

Melanargia lachesis (Hübner, 1790)

DESCRIPTION

Wingspan: From 4.5 to 5.8 cm. **Closed wings:** Their background is white with veins and black, grey or grey-yellowish shapes. On the forewing, there is a small black spot close to the apex. On the hindwing, there is a peculiar pattern, which is broken in the middle. A series of black eyespots surrounded by white rings, which are outlined in grey, can be also seen. **Open wings:** They usually do not stretch their wings. Their design is rather similar to the open wings, but there is more black colour, and a characteristic pattern on the forewings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Western Marbled White: When the wings are closed, veins are reddish as well as eyespots on the hindwings.

Their centre is blue and there is a thin and blackish ring around them. When it closes the wings, the pattern in the centre of the wings is different, as there is a big white spot close to the front margin. **Spanish Marbled White:** On closed wings, the eyespots on the hindwing are reddish, and their centre bluish, while the outer ring is rather black and thin. There are two small reddish eyespots on the forewing. When it stretches the wings, the central pattern is different, as it has a black stripe which is at right angles to the front margin and close to the base of the wings.



Medioluto herrumbrosa



Medioluto Inés

Western Marbled White

Spanish Marbled White

BIOLOGY AND HABITAT

It mostly flies in June and July, and takes one generation a year to do so. It mostly lives in mountainous locations, whether these are forests or well-preserved thickets, or some more degraded places such as stony areas, bushes, grassland and pastures. Their caterpillars feed on grass plants, such as Purple False-brome (*Brachypodium phoenicoides*), Cocksfoot (*Dactylis glomerata*) and some other species that belong to the genera *Bromus* and *Festuca*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is relatively common on the stages along the GMP which go through the Serranía de Ronda. It is rare and limited to the east and the north of Málaga, where they might exist in greater numbers than it known. It is not present on the coastal stages, included the mountains on the coast.



Legend:

- Great Malaga Path
- Distribution of the species along the GMP



Western Marbled White

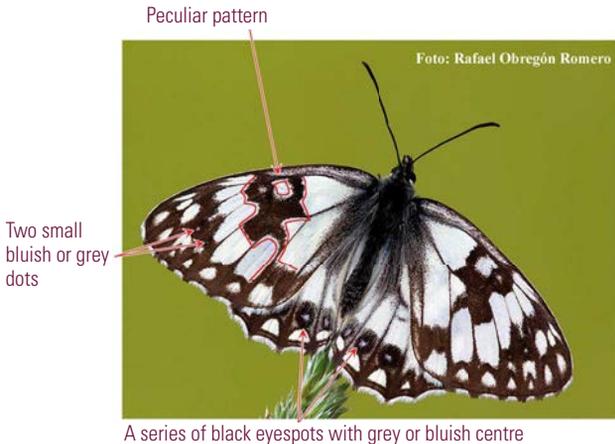
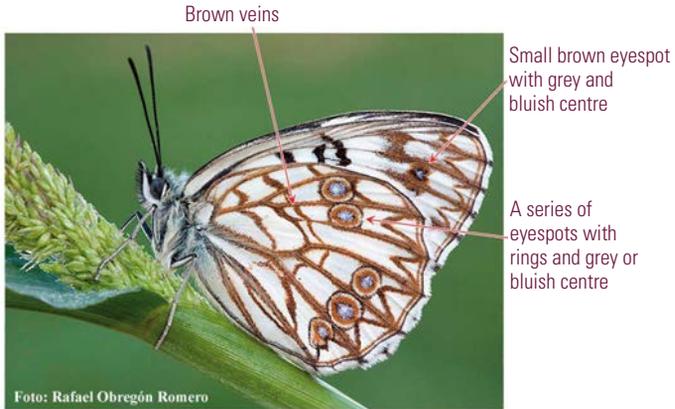
Melanargia occitanica (Esper, 1793)

DESCRIPTION

Wingspan: From 4.2 to 6 cm. **Closed wings:** Their background is white. There are veins and brown patterns on the apex and hindwings. It seems rusty. A small brown eyespot with a grey centre can be seen on the forewings. There are bigger eyespots with rings and grey or bluish centre on the hindwings.

Open wings: They usually do not stretch their wings. Their background is white with black patterns, some of which are rather unique on the forewings. These also have white squares close to the front margins. There are two small bluish or greyish, not always visible, spots on the forewings, while the hindwing have series of eyespots with grey or bluish centre.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Iberian Marbled White: When its wings are closed, veins and patterns are black. There is a series of black eyespots, outlined in white or grey colour. When it stretches the wings, the eyespots on the hindwings are black and form part of a black stretch. There is a characteristic black pattern on the forewings, which do not have a white square close to the front margins.

Spanish Marbled White: On closed wings, we perceive veins and black patterns. The eyespots on the hindwing are smaller. When it stretches the wings, its forewings have a rather unique design, as there is a back stretch which is at right angles to the front margins and the base of the wings.



Iberian Marbled White



Spanish Marbled White

BIOLOGY AND HABITAT

This species takes one generation a year to fly, above all, in May and June. It can be found in mountainous areas, and often on places which are spoilt to some extent, which are exposed and sunny, like stony areas, pastures and esparto grass fields. Their caterpillars feed on grass plants, such as esparto (*Stipa tenacissima*) and False-bromes (*Brachypodium genus*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

As for the species from the same genus, the Western Marbled White is the rarest in Málaga, as it has only been spotted on stages 13, 20, 22, 33 and 34 along the GMP. It is rather numerous along the last two stages, though it is limited to certain locations. One colony lives at the end of stage 33 and the beginning of 34. It is likely to be more present, above all on the stages in the chalky mountains, especially in the Tejada and Almirara Mountains, the Serranía de Ronda, and the mountains on the coast of Mijas, as well as in Blanca in Ojén, Marbella.





Spanish Marbled White

Melanargia ines (Hoffmannsegg, 1804)

DESCRIPTION

Wingspan: From 4.2 to 5 cm. **Closed wings:** Their background is white with veins and back patterns. Two small reddish or brown eyespot with a grey or bluish centre can be seen on the forewings. The same colours repeat on hindwings eyespots, which are softly outlined in black and have a grey or bluish centre.

Open wings: They usually do not stretch their wings. Their background is white with black patterns, one of which is rather unique on the forewings. These also have a black stripe at right angles to the front margins and close to the wings base. There are two small bluish or greyish, not always visible, spots on the forewings, while the hindwing have series of eyespots with grey or bluish centre.

KEY FOR VISUAL IDENTIFICATION

Two small reddish or brown eyespot with a grey or bluish centre



Reddish eyespots, outlined in black with a grey or bluish centre

Peculiar pattern

Black perpendicular stripe



Two small grey or bluish dots

A series of black eyespots that are grey or bluish on inside

SIMILAR SPECIES

Iberian Marbled White: When its wings are closed, veins and patterns are less striking, and there is a series of black eyespots, outlined in white or grey. When it stretches the wings, the eyespots on the hindwings are black and form part of a black stretch. There is a characteristic black pattern on the forewings, which do not have a black stripe that is perpendicular to the front margins and close to the base of the wings. **Western Marbled White:** When the wings are closed, we can see brown veins and patterns which look rusty. The eyespots are larger. When it stretches the wings, the forewing has a rather unique design, as there is a white square close to the front margin.



Iberian Marbled White



Western Marbled White

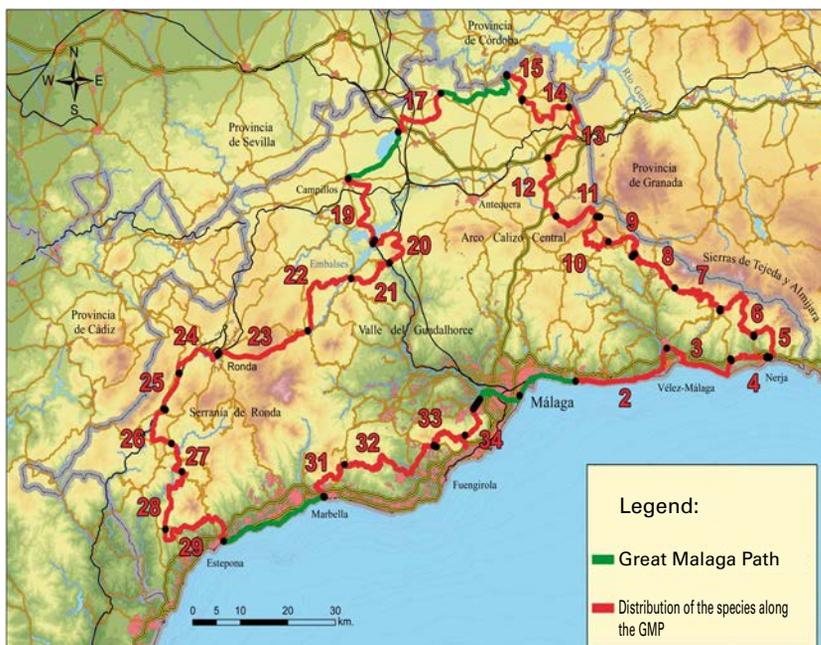
BIOLOGY AND HABITAT

One generation a year flies for a long time, from March or July, above all during the two months in the middle. It flies in all kinds of habitats, above all in mountainous areas, including well-preserved forests, on one side, and degraded surroundings, such as hills or slopes close to the coast, stony places and esparto grass fields, on the other. Esparto and other grasses (*Stipa*, *Brachypodium* and *Festuca* genera) serve as food to their caterpillars.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found on all stages, except some which are on the coast and in the north of the province, where it can be limited to certain places or it is not present. There can be plenty of these butterflies on slopes which face south, especially in the coastal mountains of Tejeda and Almirajara.





Rock Grayling

Hipparchia alcyone (Denis & Schiffermüller, 1775)

DESCRIPTION

Wingspan: From 4.6 to 6 cm. **Closed wings:** They are light brown, sprinkled with darker colour and grey. On the forewing, a black eyespot with a white centre and yellow outline can be perceived. There is also a smaller eyespot below it, which can hardly ever be seen. A wide white stretch goes across the hindwings. There are two wavy lines that spread from the brown section to the base of the wing. The first line is touching the white one, and its angles are slightly closed, while the second one is parallel to the outer margin. **Open wings:** This species practically never stretches its wings. Dark brown with yellowish stretches can be seen on all wings. The forewing has two eyespots.

KEY FOR VISUAL IDENTIFICATION

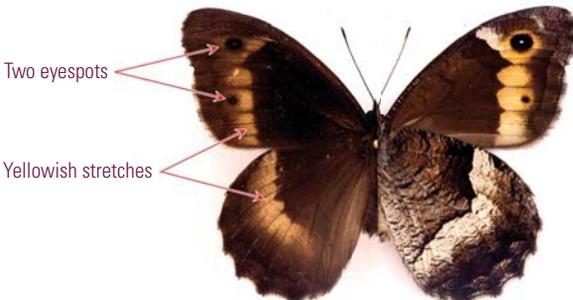
Black eyespot with a white centre and yellow outline



Slightly closed angles

Very wide white stripe

Wavy dark lines



Two eyespots

Yellowish stretches

Photo: Rafael Obregón Romero

SIMILAR SPECIES

Graying: The main difference is the white stripe on the hindwing, which gets narrower at the front margin because of a brown section in the inner part of the wing. On the hindwing, there is also a dark eyespot close to the anal angle, with vague borders and a white dot in the centre. **Great Banded Grayling:** A line which is parallel to the hindwing outer margin is no wavy, but zigzag and angled, the same as a line which meets the white stretch on the inner part of the wing. The white stretch goes across the middle of the wings, between the base and the larger white stretch. On the forewing, a black eyespot is partly outlined in white.



BIOLOGY AND HABITAT

There is only one generation that flies a year. Exceptionally, it flies from May to September, although it is more common and plentiful during June and July. It mainly lives in well-preserved forests, such as pine woods, oak and cork oaks groves (the latter one in lesser extent) and the Spanish fir forests. It can also be found in tony areas and bushes. It lives at an altitude between 650 and 1900 m. It is often present in open areas in woodland, such as grassland, pasture and scattered thickets. Its caterpillars feed on grasses that belong to genera *Festuca* and *Arrhenatherum*, although these butterflies sometimes lay eggs away from the plants, for example, stones or on gorses (*Ulex spp.* and *Genista hirsuta*).

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DISTRIBUTION

The species is present in small numbers and only at specific places in the Arco Calizo Central, the Serranía de Ronda, Tejedá and Almirajá Mountains, where they can probably be found on other trails. There might also be some butterflies at limited places in the northern stages, especially along stages 12, 13, and 14.





Graying

Hipparchia semele (Linnaeus, 1758)

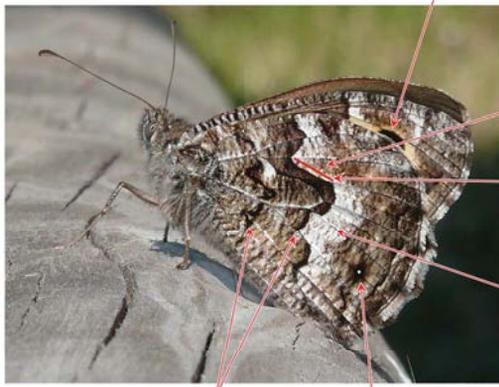
DESCRIPTION

Wingspan: From 4.3 to 5.5 cm. **Closed wings:** They are light brown, sprinkled with darker colours and grey. On the forewing, a black eyespot with a white centre and yellow outline can be perceived. There is also a smaller eyespot below it, which can hardly ever be seen. A wide white stripe, mottled with dark colours so that the white can be difficult to see, goes across the hindwings up the front margin, close to which it breaks. There are two wavy lines that spread from the brown section to the base of the wing. The first line is touching the white one and a long border line at the place where the white stripe is interrupted. There is a small black eyespot close to the anal angle. Its outlines are not clearly marked and its centre is white.

Open wings: This species hardly ever stretches the wings. Dark brown with orange stretches on both wings. The forewing has two black eyespots and a white centre. There is another eyespot on the hindwing, close to the anal angle.

KEY FOR VISUAL IDENTIFICATION

Eyespot similar to the one on Rock Grayling's wings



Broken white stripe

Long border line

White stripe

Black wavy lines

Black eyespot with white centre

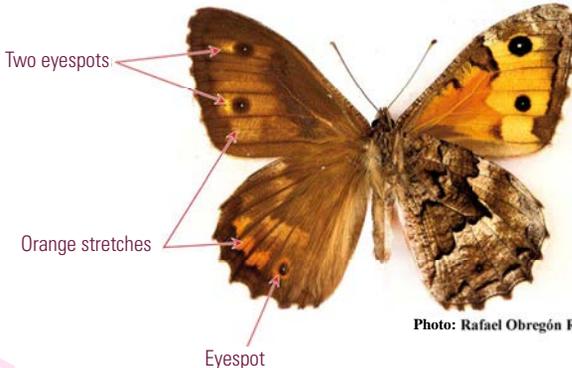


Photo: Rafael Obregón Romero

SIMILAR SPECIES

Rock Grayling and Great Banded Grayling: The above species can be distinguished from these two, mainly, because the white stripe on the hindwing is not broken, and it stands out more as there are no black scales over it.



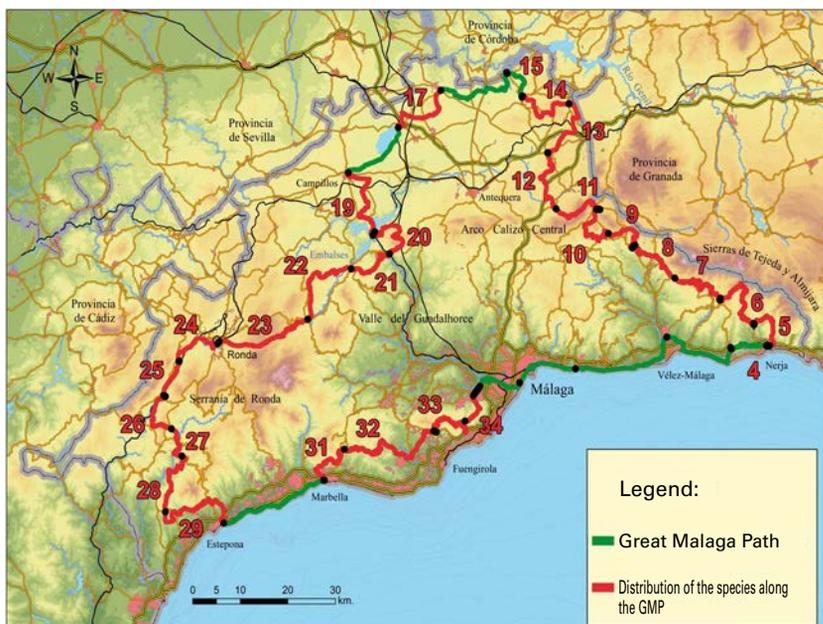
BIOLOGY AND HABITAT

This species takes only one generation a year to fly from May to October. There are more butterflies in June and July. They generally live in forests, including oak, cork oak, and Spanish fir woods. They can also be found in thickets, grassland and some kinds of bushes. In the forests, they often rest on tree trunks, where they cannot be perceived due to their colours and patterns. Their caterpillars feed on varied grasses, among them, esparto (*Stipa spp.*) and False-bromes (*Brachypodium spp.*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies are typical for forests, so they can be found on most of GMP stages, though not in great numbers and they live in specific kind of places. The species cannot be spotted along stages that do not go through forests, such as coast paths and some more degraded trails in the north of the province.





Tree Grayling

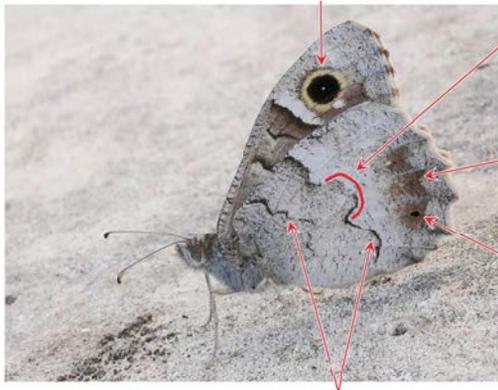
Hipparchia statilinus (Hufnagel, 1766)

DESCRIPTION

Wingspan: From 4.2 to 5.2 cm. **Closed wings:** Their colour is silver grey mottled with brown. There are two large black eyespots with a yellow ring and white centre on the forewing, though only one can be usually seen. On the hindwing, there are two curvy or wavy lines, which are clearly round in the centre. A brown spot with a black dot at the bottom can be seen on the margin close to the anal angle. **Open wings:** This species hardly ever stretches the wings. They are dark brown with two eyespots on the outer part which are difficult to be seen inside. There is a back dot close to the anal angle on the hindwing.

KEY FOR VISUAL IDENTIFICATION

Black eyespot that is outlined in yellow and has a white centre



Round part

Brown spot

Black dot

Wavy black lines

Photo: Rafael Obregón Romero

Two hardly visible eyespots



Black dot

SIMILAR SPECIES

Striped Grayling: It is generally bigger, and there are larger brown sections on its wings. On the hindwing, the lines that go across it are wider, and the central one is clearly pointed. There is a short line between this and a wavy line which is close and parallel to the outer margin.



BIOLOGY AND HABITAT

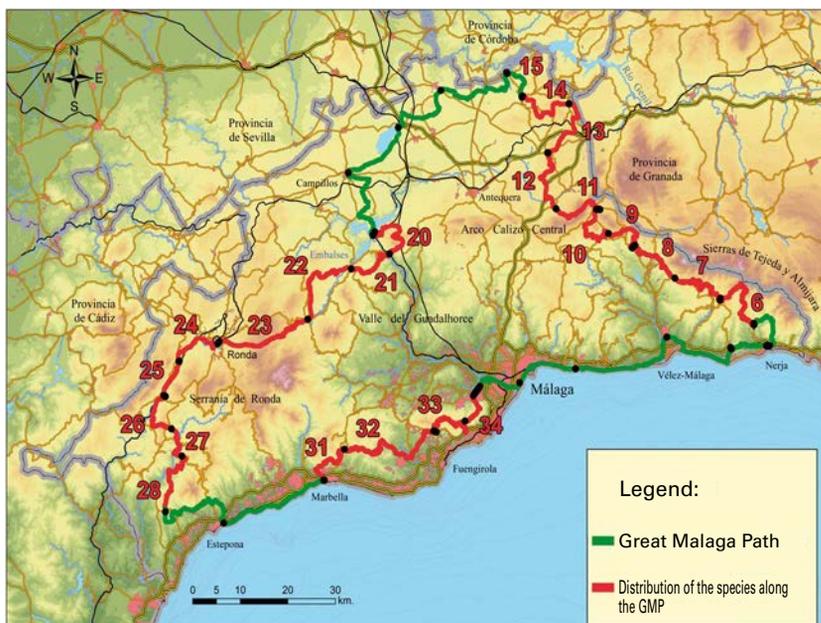
The species has one generation a year which flies from July to September.

It is typical in sparse oak forests, their favourite habitat, where it lives in open, and stony areas, or in grassland. It can also be found in cork oaks and reforested pine trees forests to a lesser extent. Its caterpillar feed on grass plants such as oat (*Avenula spp.*), esparto (*Stipa spp.*), Brome pollen (*Bromus spp.*) and False-brome (*Brachypodium spp.*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It can be found on every stage of the GMP, although in limited number of places and in small numbers. There might be some of it populations on other stages, above all along stages 17 and 19.





Striped Grayling

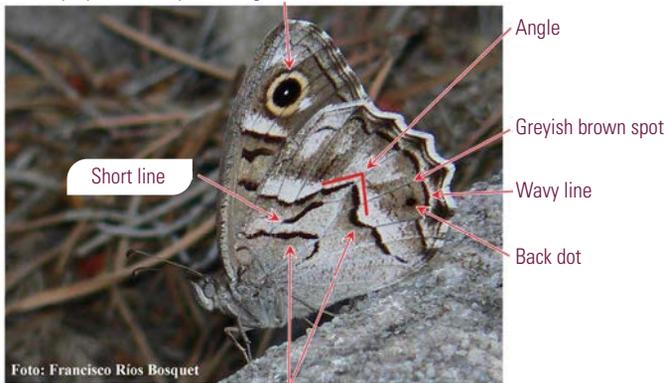
Hipparchia fidia (Linnaeus, 1767)

DESCRIPTION

Wingspan: From 4.8 to 6.2 cm. **Closed wings:** Their colour is silver grey mottled with brown. There are two large black eyespots with a yellow ring and white centre on the forewing, though only the one close to the apex can be seen. On the hindwing, there are two wide angled lines. The one in the centre is curvier and it has a prominent angle in the middle. There is a short line between these two, and the fourth one, which is parallel and close to the outer margin. There is a wide greyish brown spot between the line at the margin and the one in the centre, and a visible black dot close to the anal angle. **Open wings:** It is difficult to be seen like this. It only stretches the wings when it fights other butterflies. Their colour is dark brown with two clearly visible eyespot, above all in the case of females, when the eyelike markings are surrounded by yellow rings and have a white spot next to each of them. Female butterflies have another eyespot with rings on the hindwing, as well as some yellowish spots on the forewing. Male butterflies do not have rings on their wings but do have white spots.

KEY FOR VISUAL IDENTIFICATION

Black eyespots with a yellow ring and white centre



Orangey spots

Wide angled lines

FEMALE

Two eyespots outlined in yellow

White spots



Small eyespot

SIMILAR SPECIES

Tree Grayling: It is normally smaller, and has less brown colour on the wings. On the hindwing, the lines that go across it are narrower, and the one in the centre is clearly rounded. The outer margin on the hindwing has no lines.



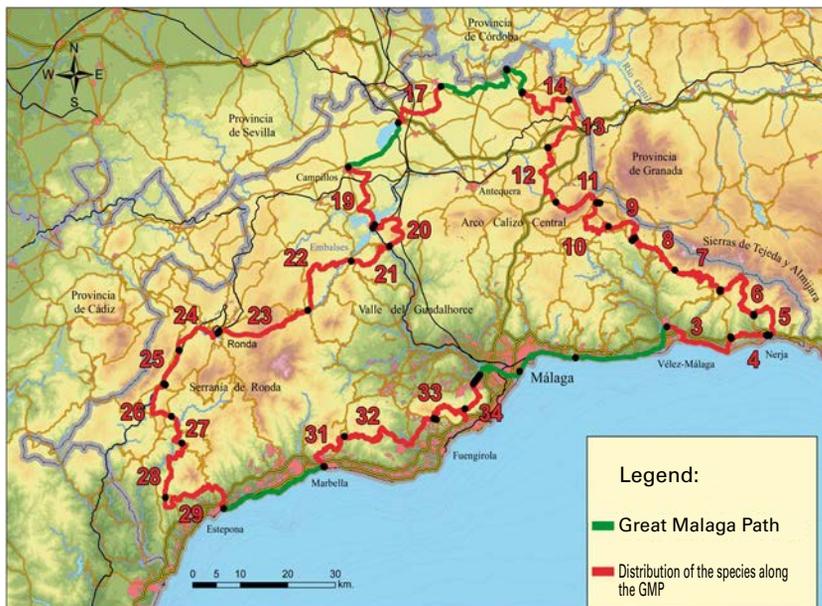
BIOLOGY AND HABITAT

There is only one generation a year, but the emergence period is rather long. The butterflies from the same surroundings can emerge from the end of May to September, and then they fly until the middle of October. They prefer open, dry and hot, places, such as sparse woodland and scrubland on steep mountain sides, stony areas and esparto fields. Their caterpillars feed on the esparto (*Stipa spp.*), and other grasses, such as False-bromes (*Brachypodium spp.*) and *Festuca spp.*

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It is rather present and spread along the GM, especially in dry and sunny areas on the Tejada and Almirajara coastal mountains. There are fewer butterflies in the rest of cases, above all in the coastal stages in La Axarquía, those in the north of the province and the Genal Valley, where it is rare and placed in limited number of places.





Hermit

Chazara briseis (Linnaeus, 1764)

DESCRIPTION

Wingspan: From 4.5 to 6 cm. Generally, male butterflies can be seen, while females are rare. **Closed wings:** male butterflies are light brown or cream coloured. There is an eyespot on the forewing and two dark brown spots. The hindwing has brown stretch at the bottom, which is broken in the centre. In parallel to the outer margin, there is another brown stretch that is darker than the rest of the wings and has small white dots, which cannot always be seen. The females forewing, is similar to the one on male butterflies, but the hindwing is greyish with a series of small white dots which cannot always be seen. **Open wings:** This species practically never stretches its wings. Both sexes are brown with two eyespots and some oval white spots on the forewing. There is a white stretch on the hindwing. The spots on the females forewings are longer and wider than those on the hindwings.

KEY FOR VISUAL IDENTIFICATION

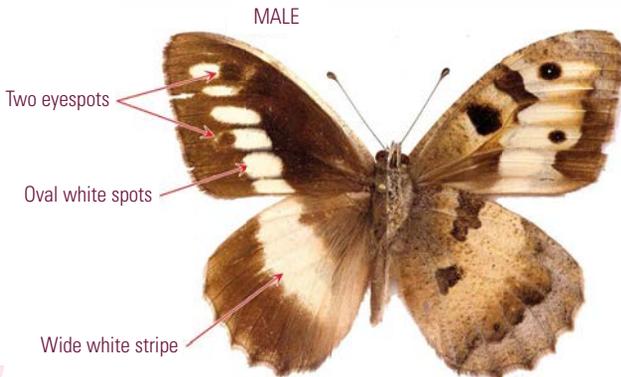
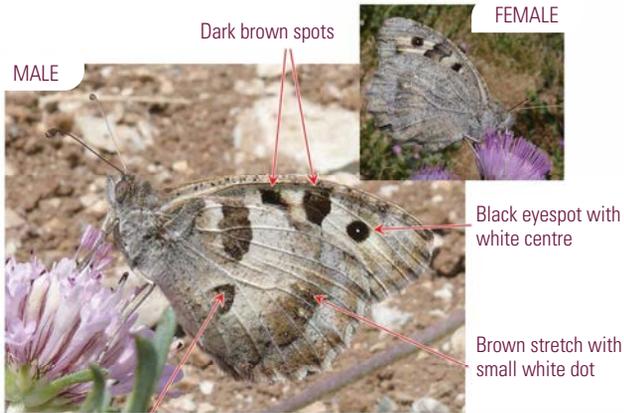


Photo: Rafael Obregón Romero



SIMILAR SPECIES

There are no species which can be confused with this one due to their peculiar patterns and colours.

BIOLOGY AND HABITAT

They fly from June to September, and mostly emerge in June and July.

The species lives in large areas of grassland, esparto fields and pastures, as well as in open areas in oak and pine forests, in less rugged mountains that are between 790 m and 1788 m high. Their caterpillars feed on grasses that belong to the *Bromus* and *Festuca* genera.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is rather rare and limited to specific places in Málaga, such as the Serranía de Ronda and high mountains from the ranges of the Tejada and Almijara. On the GMP, it is only present on stages 23 and 26, but it is bound to be found at specific places on the rest of the stages in the mountains. There is a possibility to find it on the stages in the Arco Calizo Central (No 11), where it has not been spotted yet, and the Almijara Mountains.





Black Satyr

Satyrus actaea (Esper, 1781)

DESCRIPTION

Wingspan: From 4.2 to 5.8 cm. Female butterflies are hardly ever spotted.

Closed wings: Male butterflies are dark brown, almost black. There is an eyespot surrounded by rings with a white centre on the forewing. On the hindwing, a wavy and angled line, which is sometimes difficult to be perceived, crosses it in the middle. There is a white stretch over it, as well as on the margin. Female butterflies are similar but much lighter, so the above details are easier to be seen in the case of male butterflies. **Open wings:** It hardly ever rest with open wings. Male butterflies are dark, almost black, with a black eyespot, which is sometimes difficult to be perceived, and a prominent white centre. Female butterflies are lighter, and their eyespot is outlined in lighter brown rings. They can also have an eyespot close to the anal angle. The hindwing can reflect brown colour which is lighter than the rest of the wings.

KEY FOR VISUAL IDENTIFICATION



Black eyespot with a white centre





SIMILAR SPECIES

There are no species which can be confused with this one due to their peculiar, almost black, colour.

BIOLOGY AND HABITAT

There is one generation a year of this specie, which emerges in July. Some butterflies fly until September. It lives in high or medium-high mountains, from 1300 m to 1800 m high. Very often, they can be seen on steep and stony areas, above all in some bushes, esparto fields, pastures and other kinds of shrubs. Its caterpillars feed on the *Stipa offneri*, a kind of esparto, and other grasses from the genus *Festuca*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is rare and limited to specific places in Málaga, as it has only been spotted in the medium-high and high mountainous area that belong to the Prieta and the Sierra de las Nieves Mountains. None of the stages stretches close to this species colonies, nor their surrounding corresponds to the conditions, above all the height, this species needs. It is greatly important to send any information about spotting the species away from the above mentioned mountains to the author of this guide.





Great Banded Grayling

Kanetisa circe (fabricius, 1775)

DESCRIPTION

Wingspan: From 5.5 to 6.8 cm. **Closed wings:** They are brown mottled with dark and grey colours. There is a black eyespot on the forewing with a white centre partly outlined in white as well. The hindwing has a wide white stripe which crosses it completely, while another stripe stretches up to its middle. There is a zigzag line parallel to the outer margin. **Open wings:** They hardly ever show the inner part of their wings. They are dark brown with white spots on the forewings, and a wide stretch on the hindwings. There is a dark eyespot on the forewing.

KEY FOR VISUAL IDENTIFICATION

Black eyespot partly outlined in white



Zigzag line

White stripe

White stripe

Curvy black line

Eyespot

White spots

White stripe

Photo: Rafael Obregón Romero

SIMILAR SPECIES

Rock Grayling: The eyespot on the forewing is outlined in light yellow. There is no white stripe close to the wing base on the hindwing, and the main stripe is wider. The line which is parallel to the outer margin is wavy not zigzag. **Graying:** There is an eyespot on the forewing, which is outlined in light yellow. The white stripe on the hindwing is narrower, less prominent and broken at the front margin.



Banda acodada

Rock Grayling



Semele

Graying

BIOLOGY AND HABITAT

The only one generation of these butterflies flies from June to the end of July.

It lives in mountainous areas, in sparse woodland with large surfaces of grassland, where their caterpillars' foodplants, such as grasses from *Festuca*, *Elymus* and *Brachypodium* genera can be found.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

In Málaga, it is restricted to high areas in the Tejada Mountains, where only one colony has been spotted at an altitude of 1590 m. None of the stages stretches close to this colony. Please send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





Two-tailed Pasha

Charaxes jasius (Linnaeus, 1767)

DESCRIPTION

This species is also known as the Foxy Emperor. Wingspan: From 6.2 to 8.5 cm. **Closed wings:** A peculiar pattern composed of red, brown and white stripes stands out. A wide white stripe goes across the forewings and hindwings. Outer borders are orangey or yellowish and have two tails on each hindwing, as well as some blue spots. **Open wings:** They are brown with broad orangey or yellowish stripes on the outer margins. There are blue spots and two tails on the hindwings.

KEY FOR VISUAL IDENTIFICATION

Red, brown and white stripes



Orangey or yellowish margin

Two tails on each wing

Photo: José Antonio Ríos Bosquet

Wide white stripe

Blue spots



Orangey or yellowish margin

Two tails

Blue spots



SIMILAR SPECIES

and colours.

This species is impossible to be confused with any other species, whether it rests or flies, due to its size, patterns

BIOLOGY AND HABITAT

Two generations are born a year. They fly from March to November, although they are usually seen in June, July and August, and sometimes in October, if the weather is convenient for this species. These butterflies are commonly present in well-preserved cork oak or river bank groves, and other places where strawberry tree (*Arbutus unedo*), their caterpillars' foodplant can be found. These butterflies are migratory species and spread easily, so they can be seen in any kind of forests or in mountainous areas, even on the tops, as they exhibit hilltopping. These butterflies fly powerfully and glide, so they can look like birds. From time to time, they get closer to people on their way and go around them. They like resting on middle-high or high branches and bushes, where they spend some time under the morning sun.

November, although they are usually seen in June, July and August, and sometimes in October, if the weather is convenient for this species.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species has been spotted on only four stages of the GMP. These are the stretches that go along the Genal River and through the Alpujata and Mijas Mountains. Nevertheless, considering their migratory nature and their favourite habitat, they are likely to be present on all stages in the western part of Málaga. They could even be spotted in the Tejada and Almijara Mountains, but in small numbers and at limited locations. It is greatly important to send any information about spotting the species in the east and north of the province to the author of this guide.

These are the stretches that go along the Genal River and through the Alpujata and Mijas Mountains. Nevertheless, considering their migratory nature and their favourite habitat, they are likely to be present on all stages in the western part of Málaga. They could even be spotted in the Tejada and Almijara Mountains, but in small numbers and at limited locations. It is greatly important to send any information about spotting the species in the east and north of the province to the author of this guide.





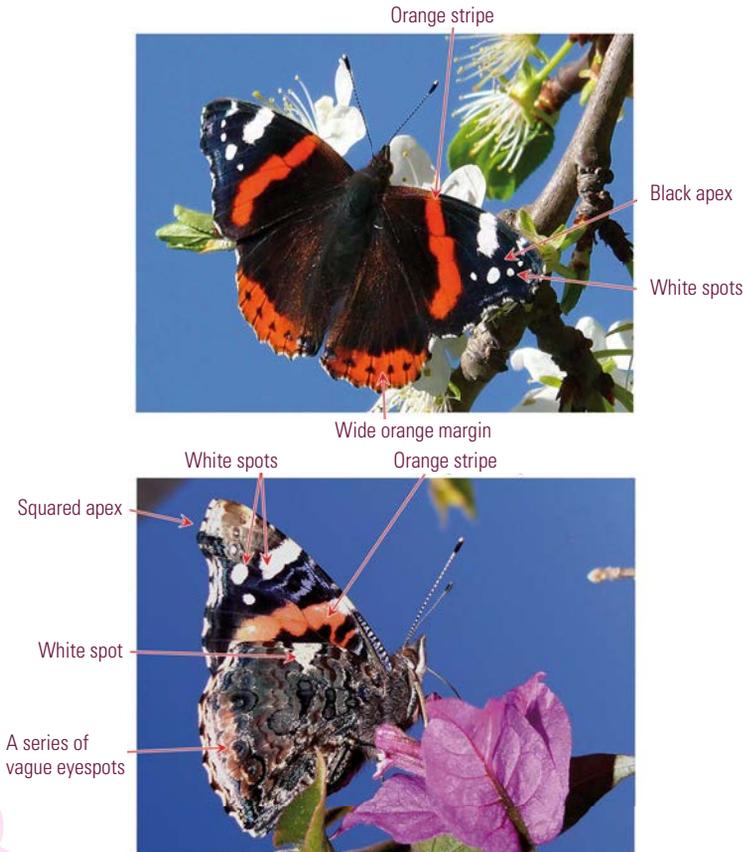
Red Admiral

Vanessa atalanta (Linnaeus, 1758)

DESCRIPTION

It is sometimes called Red Admirable. Wingspan: From 5 to 6.4 cm. **Open wings:** They are dark brown, although the hindwings and the base of the forewings are almost black. There is a striking orange or reddish stripe in the middle of the forewing. A similar stripe can be seen on the hindwing, at the outer margin. It has triangular black spots and steel blue section close to the anal angle. The forewing apex is black and has big white spots. **Closed wings:** It hardly ever appears like this. The hindwing has a grey background with brown and black patterns, as well as some brown and black lines. There is a series of vaguely marked eyespots, and a white spot on the front margin. The forewing apex is squared, with white spots and an orange stripe that crosses the wing.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

This species cannot be confused with any other due to its patterns and contrasting colours like black, orange and white.

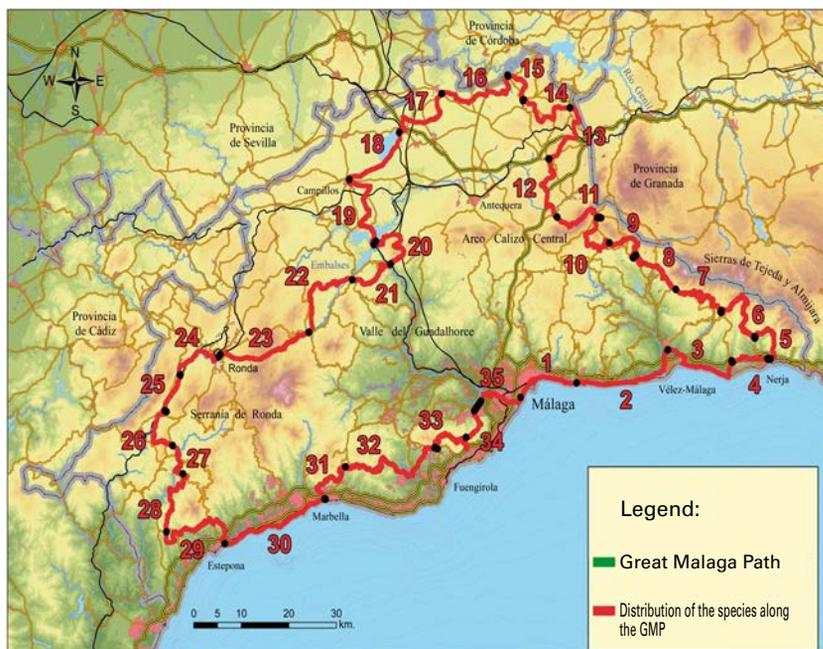
BIOLOGY AND HABITAT

This species is migratory. In spring, it starts its journey from Africa and southern Europe to the north. It takes successive generations to do so. At the end of summer, the last generation turns back towards south, and spends winter as an adult in order to start a new migratory cycle the following year. Therefore, these butterflies fly every month in a year, and slowly decrease in number until they disappear in summer. Most of them can be seen during spring in March and April, while those butterflies which hibernate come back between October and November. In winter, they fly during warm, sunny days without wind. Due to their migratory nature, they can be spotted in all kinds of habitats that range from high mountains and dense forests, to rural and urban areas, where these butterflies drink on ornamental plants, above all the Lucky Red Hot (*Lantana camara*) and the bougainvillea (*Bougainvillea spp.*). In winter, they choose forests and scrubland on the lower and middle-high sunny mountain slopes that face south, which is common in the coastal mountain ranges. Their caterpillars feed on the *Urticaceae*, above all, nettles (*Urtica spp.*) and the *Parietaria judaica*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the most common species in Málaga and can be seen at any stage that forms part of the GMP, although occasionally, while it spreads or migrates.





Painted Lady

Vanessa cardui (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 4.8 to 6 cm. **Open wings:** They are bright orange, and the body and the base of the wings are brown or gold colour. The forewing has white spots and a black apex. This colour stretches all the way to the anal angle. The hindwing has black spots in the middle of the wings, and a series of large black spots, parallel to the outer margin, which also bears back spots. The spots at the anal angle are blue. **Closed wings:** It does not appear like this very often. Both, hindwing and forewing, are light brown, or similar shades, like cream, with white spots on the forewing and a series of blue eyespots surrounded by differently coloured concentric rings. The hindwing has a white stripe close to the margin and a grey dotted line in it.

KEY FOR VISUAL IDENTIFICATION



Blue spots



SIMILAR SPECIES

This species can be only confused with *Vanessa virginiensis* (Drury, 1773), but this butterfly was only spotted once, in the 1990s in Casares. This was probably a lost butterfly, which came from the colonies that lived in Huelva or Portugal. When its wings are open, this species can be distinguished thanks to the white spot that is outside the forewing apex, in the orange zone close to the anal angle and on the hindwings, and because some spots have turned into eyespots with blue centre. When the wings are closed, it is darker and there is a contrast between this colour and light stripes. There are two large eyespots with concentric rings. If you believe you have spotted *V. virginiensis*, please inform the writer of this guide.

Photos: José Álvarez Gandara



BIOLOGY AND HABITAT

The same as the Red Admiral, the Painted Lady is migratory species, which comes from Africa, where it spends winter and then it takes successive generations to fly to the north of Europe. From time to time, it stops at varied points on the Iberian Peninsula, including Málaga, where it was spotted in March and April in 2009. Three migratory groups were seen, with dozens of imagoes, flying northwards. Occasionally, they would come from the sea at Punta de Calaburras in Mijas and the mouth of Guadalhorce in Málaga. Due to their migratory character, they can be seen in all kinds of habitats, which range from high mountain tops in the Serranía de Ronda to the towns and beaches. They like to visit urban zones, above all parks and gardens where they drink from the flowers of the Lucky Red Hot (*Lantana camara*). Their caterpillars feed on plenty of plants, such as mallows (*Malva sylvestris* and *Lavatera cretica*), and the cotton thistle (*Silybum marianum*) or the purple milk thistle (*Galactites tomentosus*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is present at all stages of the GMP, though it is rarer on the coast and in the north of the province.





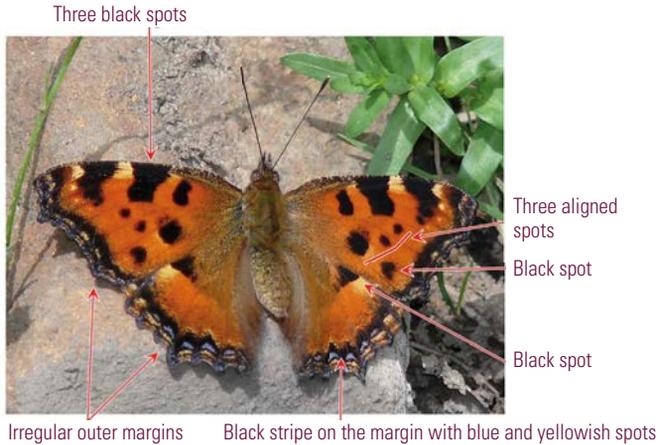
Large Tortoiseshell / Blackleg Tortoiseshell

Nymphalis polychloros (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 5.4 to 6.9 cm. **Open wings:** They are bright orange, with golden scattered scales, which make it seem dirty. The forewing has three large black spots rising on the front margin, other three which are aligned and go across the wing, and a fourth one that is separated and close to the anal angle. There is a small black spot on the on the inner side of the hindwing. To a lesser or greater extent, the black spots are sprinkled by vague attached yellow dots. Both wings have irregular outer margins, with a black stripe covered in blue and yellowish spots. **Closed wings:** The inner side is mottled with brown and grey colours, and it has a broad stripe in the middle, which is also mottled with brown and creamy white colours. The outer margin is grey.

KEY FOR VISUAL IDENTIFICATION



SIMILAR SPECIES

Small Tortoiseshell: It is smaller. When it opens the wings it seems cleaner than the above species, as there are no scales. It lacks a dot which is close to the forewing anal angle, and this is the key feature that can be used to make a difference between it and the Large Tortoiseshell. There is more grey colour on its closed wings, as well as a yellowish spot on the forewing.



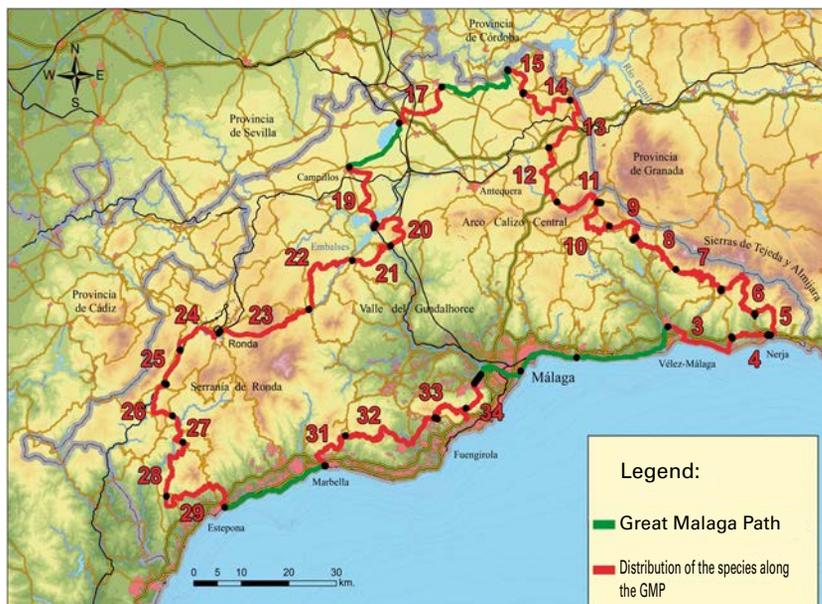
BIOLOGY AND HABITAT

There is only one generation a year, which hibernate as adult butterflies. They can be seen almost throughout the year, especially from January to March, when those species that hibernate, get active for reproduction cycle. Their young create a new generation and can be mainly spotted in May or June. They live in well-preserved forests, whether these are in the mountains or on river banks, but also in rural areas, above all, at places where almond trees grow. Their caterpillars feed on wild or cultivated bushes and trees, such as hawthorns (*Crataegus monogyna*), elm trees (*Ulmus spp.*), poplars (*Populus nigra*), hackberry tree (*Celtis australis*), almond trees (*Prunus dulcis*) and Iberian pears (*Pyrus bourgueana*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Even though this species is present on all stages of the GMP, it is rare and limits to certain areas, especially along coastal routes and in the north of the province, where it can only be seen on river banks, in forests and around abandoned almond groves where little amount of biocide was used.





Small Tortoiseshell

Aglais urticae (Linnaeus, 1758)

DESCRIPTION

Wingspan: from 4 to 5.2 cm. **Open wings:** They are bright orange and seem clean. The forewing has three big spots rising on the front margin. The one which is closest to the apex has a white spot beneath, and three more black spots which are aligned and go across the wings. There is a small black spot on the on the inner side of the hindwing. To a lesser or greater extent, the black spots are sprinkled by vague attached yellow dots. Both wings have irregular outer margins, with a black stripe covered in bluish spots. **Closed wings:** The inner side is grey, and it has a broad stripe in the middle, which is mottled with grey and creamy white colours. The outer margin is grey. There is a big yellowish spot on the forewing.

KEY FOR VISUAL IDENTIFICATION

Three black spots



White spot

Three aligned spots

No black spot

Black spot

Irregular outer margins

Black margins with blue spots

Yellowish spot



Foto: Rafael Obregón Romero

Irregular outer margins

Stripe mottled with grey and creamy white

Grey

SIMILAR SPECIES

Large Tortoiseshell / Blackleg Tortoiseshell: It is larger.

When it opens the wings it seems dirtier than the above species, as golden scales are scattered about its wings. It has a dot which is close to the forewing anal angle, and this is the key feature that can be used to make a difference between it and the Small Tortoiseshell. There is more brown colour on its closed wings, and there is no yellowish spot on the forewing.



BIOLOGY AND HABITAT

There are one or two generations a year, depending on the season. They hibernate in winter as adult butterflies.

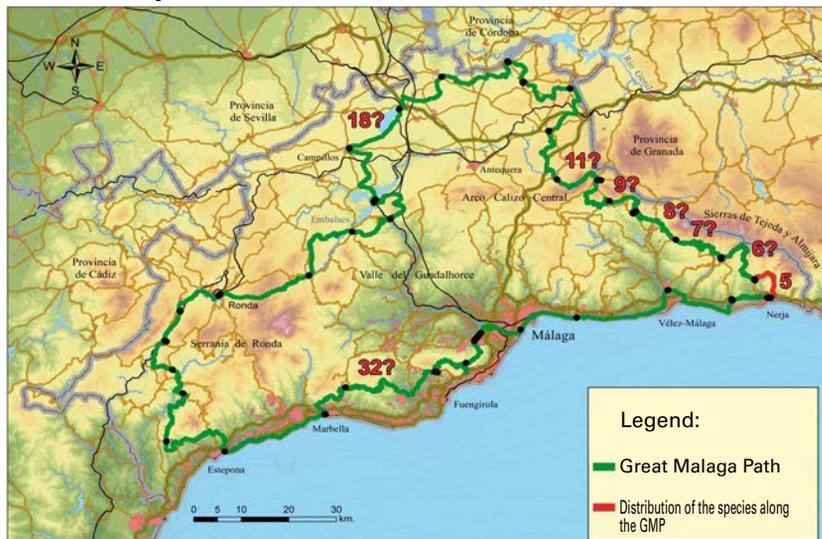
This species has not been seen many times in Málaga. Some examples of butterflies can be usually spotted in February, April and June.

The only colonies of the young in Málaga are placed on high and stony areas, or pastures and grassland, at an altitude higher than 1200 m. Their caterpillars feed on nettles (*Urtica spp.*).

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DISTRIBUTION

This species is rare in Málaga, where only one population settled in higher zones of the Tejada Mountains. Nevertheless, considering their tendency to scatter around, it has been seen in varied places in the province. As for the GMP, it was in the Almirajara Mountains. Other places where this species might be seen, as they have been spotted in the surrounding area, are the stages that go through the Tejada and Almirajara Mountains and the Arco Calizo Central, as well as around the Fuente de Piedra lagoon or the Alpujata Mountains. Please send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





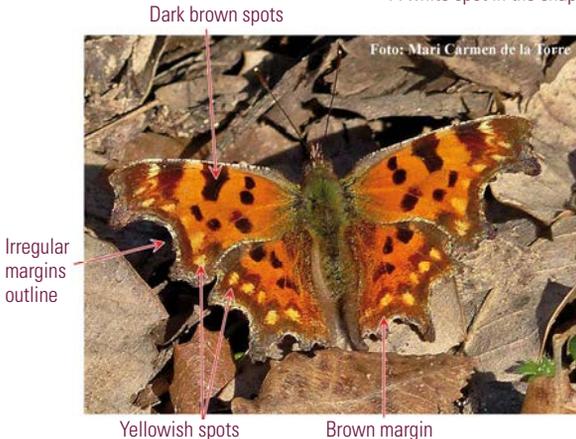
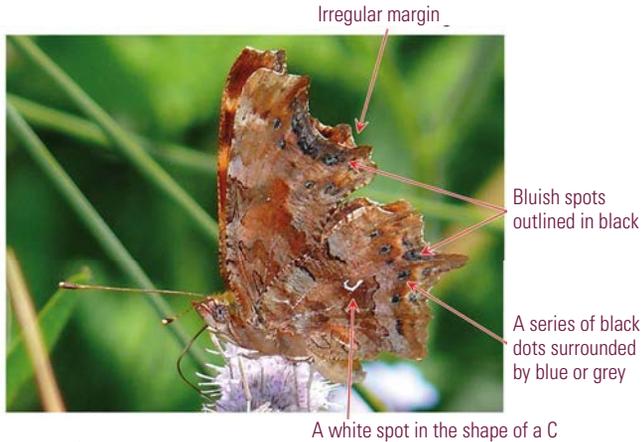
Comma

Polygonia c-album (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.5 to 5 cm. **Closed wings:** Their design is rather complex, as there are varied brown and grey shades. There is a spot on the hindwing's centre which stands out. It has a shape of a C on one of them and of an inverted C on the other. Actually, the species is named after these features. They have rather jagged outlines of the wings and a big arch on the forewings, as well as a prominent tail on the hindwings. There are bluish spots outlined in black on the margins, and on the inner part, a series of black dots surrounded by blue or grey. **Open wings:** They are orange with plenty of large dark brown spots. Each hindwing has a wide brown stripe filled with yellowish spots.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

with any other.

The ragged wings, above all when they are closed, make this species difficult to be confused

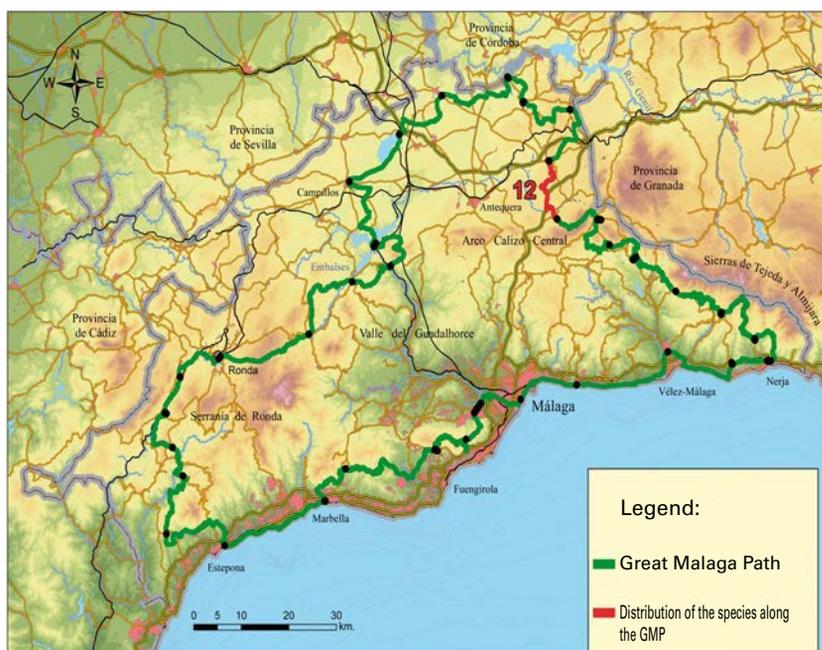
BIOLOGY AND HABITAT

There are two or three generations a year, which hibernate as adult butterflies. It is rather rare in Málaga and its biology is not detailed enough. We only know when it has been observed on few occasions, and the habitats where it lives, such as well-preserved river banks with poplars (*Populus nigra*), small-leaved elms (*Ulmus minor*) and ash trees (*Fraxinus angustifolia*). Its caterpillars feed on nettles (*Urtica spp.*), hops (*Humulus lupulus*) and elm trees (*Ulmus spp.*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the rarest and the most limited species in Málaga. Up to recently, it was only linked to the Tejada Mountains, where it has not been seen since the end of 1970s. In 2013, it was rediscovered in a new place in the province, more precisely, at Marín Stream in Archidona during an exhibition of the Alas [Wings] Association. Therefore, it can be seen on stage 12 of the GMP, although it is rare and lives at limited number of places. It may be part of some old populations on the routes that go through the Tejada and Almirajara Mountains (stages from 5 to 8), and those which stretch along Bebedero Stream (stages 14 and 15), the Turón and the Guadiaro Rivers and the Genal basin (stages 23, 25, 27, and 28).





Marsh Fritillary

Euphydryas aurinia (Rottemburg, 1775)

DESCRIPTION

Wingspan: From 3.3 to 4.6 cm. **Open wings:** There are wide orange stripes parallel to the outer margin. The forewing has a series of yellowish dots, and a series of orange arches beneath them. On the hindwing, there are some black dots, and the inside of the arches is yellowish or whitish. Both wings have some dark brown patterns with orange, light orange, and yellowish spots on their inner part. **Closed wings:** The hindwings margins have series of semicircled clearly marked white spots. These spots are less marked on the forewings, and their colour is something between white and orange.

KEY FOR VISUAL IDENTIFICATION

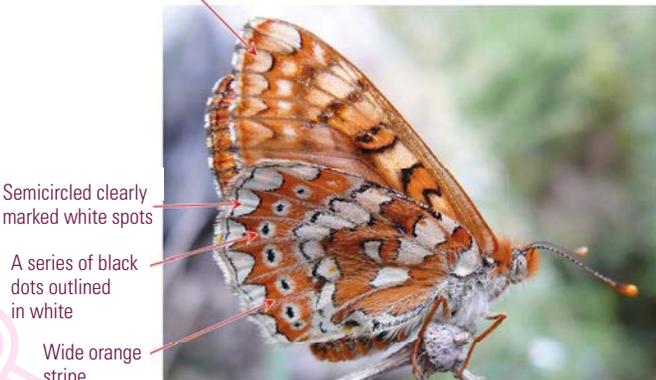
Wide orange stripe on each wing



A series of black dots

A series of arches that are yellowish or whitish on the inside

Unclearly marked white spots



Semicircled clearly marked white spots

A series of black dots outlined in white

Wide orange stripe

SIMILAR SPECIES

***Euphydryas desfontainii*:** It is very similar. The main difference consists in a series of spots on the forewings margins, which are white and yellowish, whether the wings are open or closed, while their colour is orange in the case of the Marsh Fritillary.



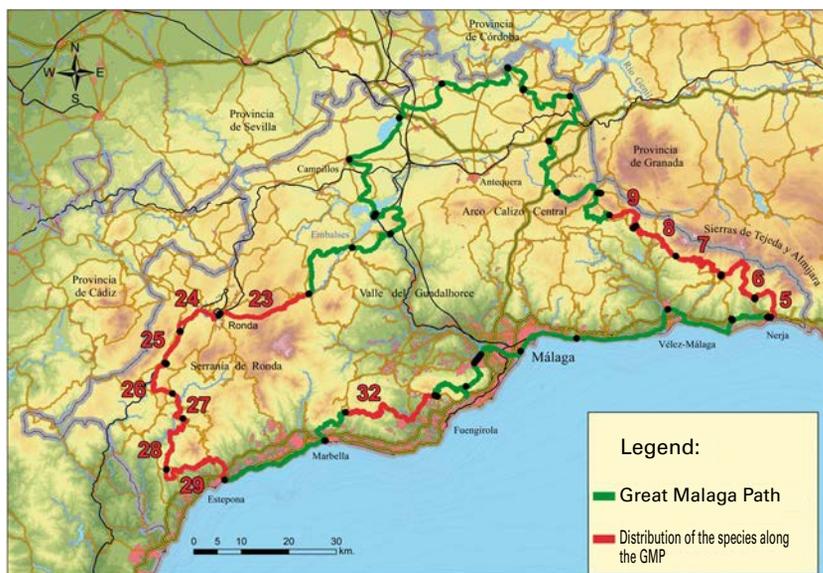
BIOLOGY AND HABITAT

The only one generation of these butterflies flies in spring, above all from the middle of May to the end of June. It lives at generally well-preserved places in forests or on scrubland, close to humid zones next to rivers, streams and cattle tracks. Their caterpillars feed on honeysuckles (*Lonicera spp.*), like *Lonicera japonica*, used in gardening. Their host plants are also *Knautia arvensis*, *Scabiosa columbaria*, as well as *Centranthus sp.*, which has been only registered in Málaga.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

As for the GSM, it is present on the stages that go through the Tejada and Almijara Mountains, Serranía de Ronda and the Alpujata Mountains, although it is rare and placed at limited number of locations. It might also be present on other stages, above all on the coast, around reservoirs, the Arco Calizo Central, and even some last surviving relic of the species' colonies in the north of the province. It is not endangered species nor it is protected by the Spanish law, but it is registered in the 1st and 2nd Annex of the European Union habitats Directive, so its conservation is priority.





Dientes gualdos (common Spanish name)

Euphydryas desfontainii (Godart, 1819)

DESCRIPTION

Wingspan: From 3.8 to 4.5 cm. **Open wings:** There are wide orange stripes which are parallel to the outer margin, with a series of white or yellowish arches coloured in white or yellowish, after which the species was named *Dientes gualdos*, what in Spanish means: 'Yellow Teeth'. The orange stripes have a series of yellowish spots on the forewings, and black spots on the hindwings. Both wings have some dark brown patterns with orange, light orange, and yellowish spots on their inner part. **Closed wings:** The hindwings margins have series of triangular and semicircled clearly marked white or yellowish spots. These is a series of black spots, outlined in white, on the hindwings orange stripe.

KEY FOR VISUAL IDENTIFICATION

Wide orange stripes on each wing



Yellowish spots

A series of yellowish dots

A series of arches that are yellowish or whitish on the inside

A series of black dots

A series of clearly marked whitish spots



Foto: José Manuel Sesma Moranas

Wide orange stripe

A series of series of triangular and semicircled white spots

A series of black dots, outlined in white

SIMILAR SPECIES

Marsh Fritillary: It is rather similar. When its wings are open, the arches on the forewing margin are orange on the inside. When it closes the wings, we can see vague whitish or orangey spots on the forewing margin.



BIOLOGY AND HABITAT

This species takes only one generation a year to fly, above all, in April, May and June.

It lives in warm and sunny places, such as mountain sides or in scattered thickets, sparse woodland, and clear areas of dense forests with grassland. Its caterpillars feed on the Giant Scabious (*Cephalaria leucantha*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rare in Málaga. It can be seen along stages of the GMP that go through the western part of the Mijas Mountains, the Turón River and the Camarolos and Archidona Mountains. Nevertheless, considering the habitats it usually lives on, it is likely to exist on most of the stages that stretch from Nerja to Archidona, around reservoirs and the Serranía de Ronda.





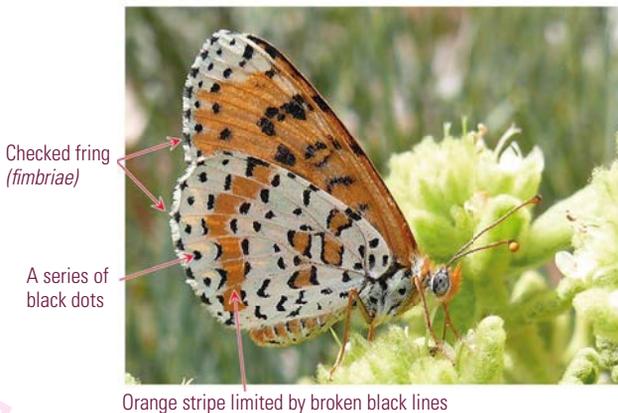
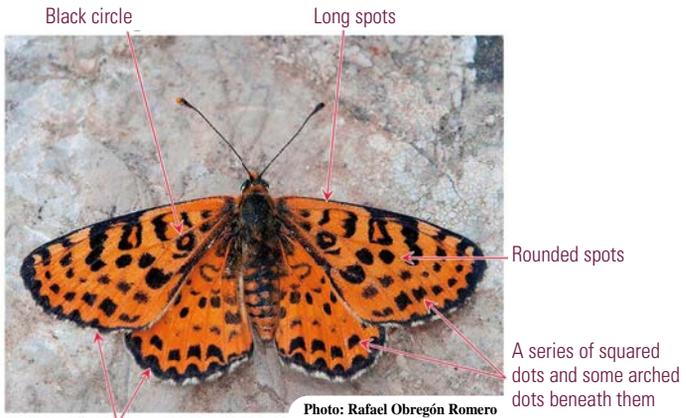
Spotted Fritillary

Melitaea didyma (Esper, 1778)

DESCRIPTION

Wingspan: From 3.2 to 4 cm. **Open wings:** The background is orange with many back spots. The outer margins stand out thanks to bulky spots towards the inner part and a series of squared dots above them and some arched dots beneath these. **Closed wings:** The hindwing has a black background and checked fringe (*fimbriae*). There is a series of black dots, parallel to the margin, and an orange stripe limited by broken black lines.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

Its peculiar pattern, which is rather sprinkled with black colour, its black and bulky margins, or the broken black lines on closed wings, make this species impossible to confuse with other fritillaries.

BIOLOGY AND HABITAT

In Málaga, it is extremely rare and limited to specific places, such as stony areas, some kinds of bushes, and grassland in higher areas of the western Tejada Mountains at an altitude between 1850 and 2000 m. It mainly flies in June.

According to the research project 'Fauna Ibérica', there are two generations a year of this species, although there might be three in lower areas and only one in the mountains. Their caterpillars above all feed on the *Plantago lanceolata*, and on the *Scrophulariaceae* family, the genus *Linaria*, and the Common Snapdragon (*Antirrhinum majus*).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species has not been spotted on any of the stages of the GMP that stretch close to the location where it lives. Nevertheless, there is a possibility that a small population can be present at the higher zones of stage 6. It is greatly important to report any information about the species spotted in Málaga to the author of this guide.





Knapweed Fritillary

Melitaea phoebe (Goeze, 1779)

DESCRIPTION

Wingspan: From 3.4 to 5 cm. **Open wings:** The background colour is orange with dark checked pattern made of broad lines. An orange spot on the forewing stands out close to the anal angle. It is longer than the rest of spots and reaches the second line of spots rows that are aligned up to the apex. **Closed wings:** The hindwings background is white or vague yellow. There are rounded orange spots outlined in yellowish colour that are surrounded by two series of arches facing the inner part of the wings. There is another broken line parallel to the others, and some ached lines that face the outer part of the wings. The space between the opposite rows is rather small.

KEY FOR VISUAL IDENTIFICATION



Orange spot, longer than the others



Arches and a line close to one another

Arched lines

Straight or arched broken line opposite the previous row of lines

SIMILAR SPECIES

Aetherie Fritillary: When its wings are closed, the main difference between this and the above species reduces to a big orange space between the opposite arched lines. When its wings are opened, only female butterflies can be confused, but in the case of the Aetherie Fritillary, the checked pattern is not so well marked, and there is no long spot close to the forewing anal angle. **Meadow Fritillary and Provençal Fritillary:** Both of these species are smaller than the Knapweed Fritillary, and have no long spot close to the forewing anal angle.



Macho

Hembra

Aetherie Fritillary



Meadow Fritillary



Provençal Fritillary

BIOLOGY AND HABITAT

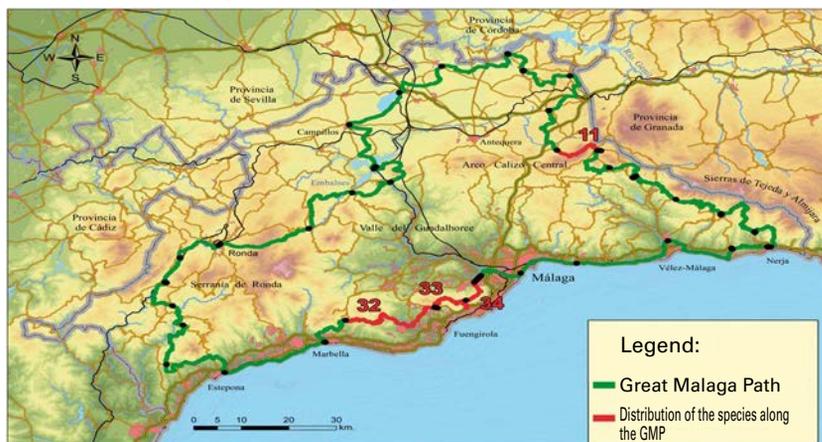
This species takes only one generation a year to fly, above all, from April to June.

It lives at dry and warm places in mountainous surroundings, as well as in degraded open areas of woodland and scattered thickets, as well as on stony and sandy ground. Its caterpillars feed on knapweeds and thistles that belong to the genera *Centaurea*, *Carduus* and *Carlina*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

It has only been spotted on the stages that go along the coastal mountains and through the Arco Calizo Central, although it is rare and limited to specific places. Nevertheless, it is likely to be found on all the stages that spread from Nerja to Archidona (from 5 to 12), as well as on those which exit between the reservoirs and Estepona (from 20 to 29), and on stage 31. There also might be some populations in the north of the province.





Aetherie Fritillary

Melitaea aetherie (Hübner, 1826)

DESCRIPTION

Wingspan: from 4 to 4.5 cm. **Open wings:** Both wings are orange with dark patterns. Male butterflies two series of dots. The upper one is bigger than the other, which can miss some dots. Female butterflies have longer and bigger dots. On the hindwing and forewing outer margins, we can see series of two arches which are one above the other, and wider in the case of female butterflies. Some female butterflies have large brown patterns which cover almost the entire orange background. **Closed wings:** The hindwings background is white or vague yellow. There are rounded orange spots outlined in yellowish colour that are surrounded by arched lines which face the inner part of the wings. There is another arched line parallel to the others that faces the outer part of the wings. The space between these opposite arches is broad and coloured in different orange shades.

KEY FOR VISUAL IDENTIFICATION

MALE



A series of large spots

Series of two arches, one above another
Rounded orange spots

Series of small dots, which can be absent

Arched lines

Opposite arched lines



Broad space between the arches coloured in orange

SIMILAR SPECIES

Knapweed Fritillary: When its wings are closed, the main difference between this and the above species reduces to a small space between the opposite arched lines. When its wings are open, both sexes have a clearly marked checked pattern, and a prominent long spot at the forewing anal angle. **Meadow Fritillary** and **Provençal Fritillary:** Both of these species are smaller, and can only be confused when they stretch their wings, though both of the species bear patterns which are more similar to a red than in the case of the Aetherie Fritillary.



Knapweed Fritillary



Meadow and Provençal Fritillary



BIOLOGY AND HABITAT

It flies in May and June, and takes one generation a year to do so.

Its favourite habitats are open, sunny and dry areas, such as shrubs, grassland and sparse woodland, usually placed at the foot of the chalky mountains, where plenty of this species caterpillars foodplants, like the cardoon (artichoke thistle, or wild artichoke, *Cynara cardunculus*) and *C. baetica* live.

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DISTRIBUTION

These butterflies are rare and their number is decreasing in Andalusia due to the changes in the use of the ground, above all, the abandon of shepherding, which was the reason why the conditions for the growth of this species foodplants were perfect. The other reasons are the use of herbicides and olive groves spreading. It is considered to be an almost endangered species in the 'Libro Rojo de los Invertebrados de España' [The Red Book of the Spanish Invertebrates], but, surprisingly, it does not form part of the Andalusian list of endangered species. It is neither protected by varied environmental regulations. The species has not been spotted along the GMP, but there is a colony which is close to stage 22, and this is the place where it is most probable to be found. Other locations which are suitable for the species are on the stages that go through the Serranía de Ronda, the north of the province, and the Llana and Huma Mountains, at stage 20.





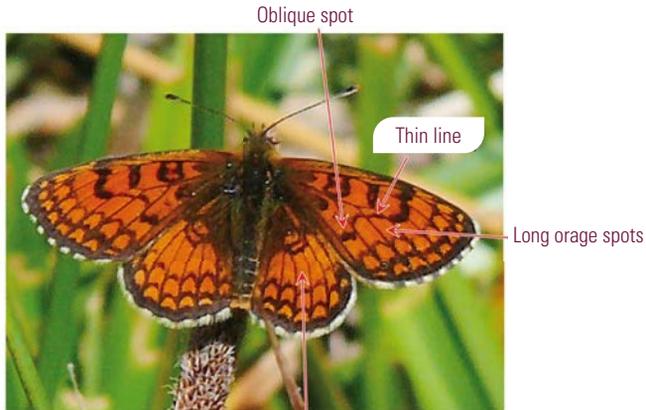
Meadow Fritillary

Melitaea parthenoides (Keferstein, 1851)

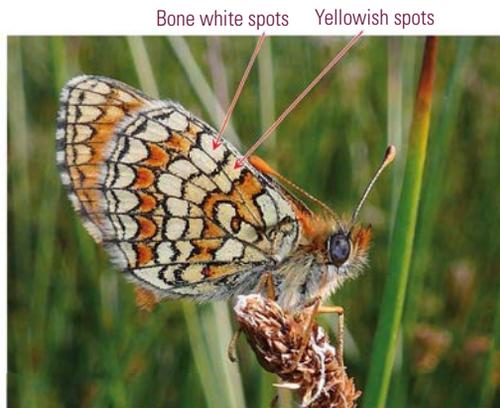
DESCRIPTION

Wingspan: From 3 to 3.5 cm. **Open wings:** Both wings are orange with some dark patterns. The forewing has an oblique spot in the middle of the inner margin. A thin arched line rises at that point and has some long orange spots beneath itself. On the hindwing, there can be seen or not a very vague line that goes across the middle, so the orange spots are stretched. **Closed wings:** Their design is typical for this genus. Two stripes, separated by a thin dark line, go across the hindwing. The outer one is bone white and the inner one yellowish.

KEY FOR VISUAL IDENTIFICATION



No line that goes across the middle



SIMILAR SPECIES

Knapweed Fritillary: It is larger and with well-marked checks. Orange spots are not so long. **Aetherie Fritillary:** It is larger. When its wings are open, the dark spots on females are bigger, above all the one that goes across the middle of the forewing. **Provençal Fritillary:** When its wings are closed, it is difficult to be distinguished from the Meadow Fritillary, but they are pure white, above all, the stripes that go across the middle of the wing. When its wings are open, the main difference between these two species is the spot in the middle of the forewing inner margin, which is not oblique but perpendicular, and often rather big as it can be connected to the one above it. It seems less orange than the Meadow Fritillary because the brown patterns in the middle of the forewing, and especially, the ones in the middle of the hindwing are broader. The latter pattern is almost invisible in the case of the Meadow Fritillary.



Knapweed Fritillary



Aetherie Fritillary



Provençal Fritillary

BIOLOGY AND HABITAT

This species is not common in Málaga. They were registered in the province, in particular, in Tejada and Bermeja Mountains in June and July decades ago. According to the guide 'Mariposas Diurnas de Sierra Nevada' [Diurnal Butterflies in the Sierra Nevada], it flies in June and July in this mountain range, and it can be spotted around grass zones next to the mountain streams and glacial lakes. There is only one generation a year. Their caterpillars feed on the family *Plantaginaceae*, in particular, on *Plantago lanceolata*, which is the only one registered on the peninsula, although they also feed on other species from the same genus.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This is one of the less common butterflies in Málaga, which cannot be found at every stage of the GMP: It is greatly important to send any information about spotting the species to the author of this guide.





Provençal Fritillary

Melitaea deione (Geyer, 1832)

DESCRIPTION

Wingspan: From 3.2 to 4.6 cm. **Open wings:** Both wings are orange with some dark checked patterns. The forewing has a perpendicular spot in the middle of the inner margin. A wide arched line rises at that point. On the hindwing, there is a line that goes across the middle, so the orange spots are smaller. **Closed wings:** Their design is typical for this genus. Two stripes, separated by a thin dark, sometimes rather vague, line go across the hindwing.

KEY FOR VISUAL IDENTIFICATION

Perpendicular spot



Lie in the middle of the wing

White stretches



SIMILAR SPECIES

Knapweed Fritillary: It is larger. There is a large orange spot facing the inner part close to the anal angle on the forewing. **Aetherie Fritillary:** It is larger. Only female butterflies can be confused with the Provençal Fritillary. Nevertheless, when its wings are open, the dark spots are bigger, above all the one that goes across the middle of the forewing. Moreover, its pattern is not really checked. **Meadow Fritillary:** When its wings are closed, it is difficult to be distinguished from the Provençal Fritillary, but they are ivory-coloured, above all, the inner stripe, which is one of two that go across the middle of the wing. When its wings are open, the main difference between these two species is the spot in the middle of the forewing inner margin, which is oblique, not perpendicular, and thin. It seems more orange than the Provençal Fritillary because the brown patterns in the middle of the forewing, and especially, the ones in the middle of the hindwing are narrower. There are only traces of the latter pattern or it is missing.



Knapweed Fritillary



Aetherie Fritillary



Meadow Fritillary

BIOLOGY AND HABITAT

There are two generations per year. In Málaga, it flies in May and June. It lives in well-preserved mountainous areas, such as forests and scattered thickets, but also grassland and pasture. Its caterpillars feed on the Scrophulariaceae or the figwort family like Common Snapdragon (*Antirrhinum majus*) or Weasel's Snout (*Misopates orontium*), as well as on the genus *Linaria* (*Linaria spp.*), and English or Narrowleaf Plantain (*Plantago lanceolata*) from the Plantaginaceae or the Plantain family.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

This species is rare and restricted to some areas, such as the Serranía de Ronda, the Arco Calizo Central, and the Tejada Mountains. It has been spotted along stages 11 and 26. It surely exist on the rest of the routes that stretch from the Serranía de Ronda to the Nerja and Alfarate reservoirs. There also might be traces of its populations in the north of the province. Please send any information about spotting the species at any point along or outside of the GMP to the author of this guide.





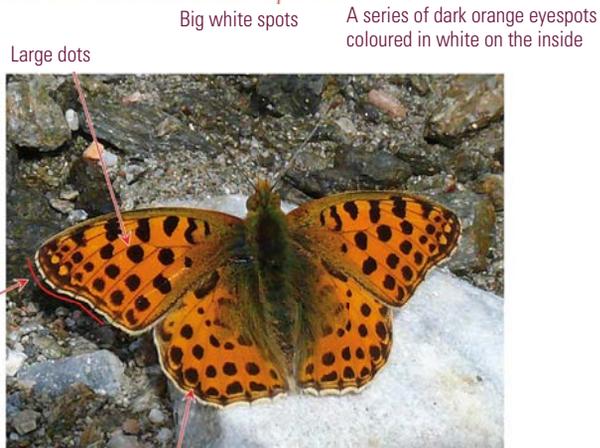
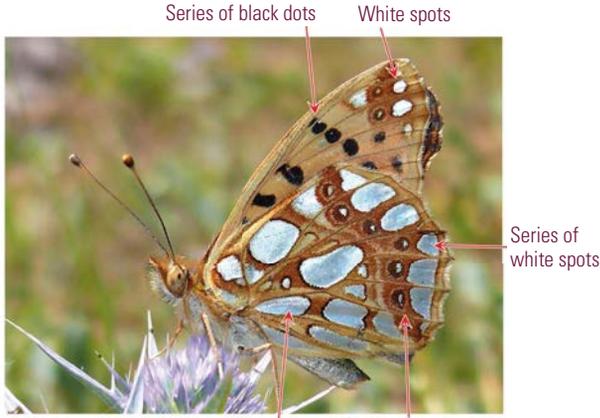
Queen of Spain Fritillary

Issoria lathonia (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 3.5 to 5 cm. **Closed wings:** Both wings are orange. The forewing is lighter, and has a series of black dots, and white spots at the apex. On the hindwing, we can see big white or silver-coloured spots, depending on the light, which are separated by a series of dark orange eyespots coloured in white on the inside. **Open wings:** Open wings have orange background with plenty of black dots, and a series of dots or half-dots on the hindwing margin. The forewing margin is curvy.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

This species cannot be confused with any other due to its large white spots on the outside, and many of black dots on the inner part of the wings, as well as a curvy margin on the forewing.

BIOLOGY AND HABITAT

It can be seen throughout the year, as it hibernates as an adult and flies during warm winter days. Nevertheless, it is more common to be spotted in May, June and July, and it can be occasionally seen during the rest of year. There are up to three generations per year.

These butterflies are rather migratory species, so they can live in all kinds of habitats. However, it usually lives in forests and on scrubland, where it reproduces. Their caterpillars feed on the genus *Viola* (*Viola sp.*), and more particularly, on *Viola arvensis*, which is the only plant from this genus that exists in Andalusia. Considering that this plant is rare in Málaga, these caterpillars might feed on *V. arborescens* and *V. demetria*, which are more common in the province.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

Even though the species is rare on the GMP, due to its migratory nature and the habitat, it can be easily found at any stage that goes through the mountains, at ranges from Nerja to Archidona, from the reservoirs to Estepona, or from Marbella to Alhaurín de la Torre. It is not impossible to find it in the northern mountains as well.





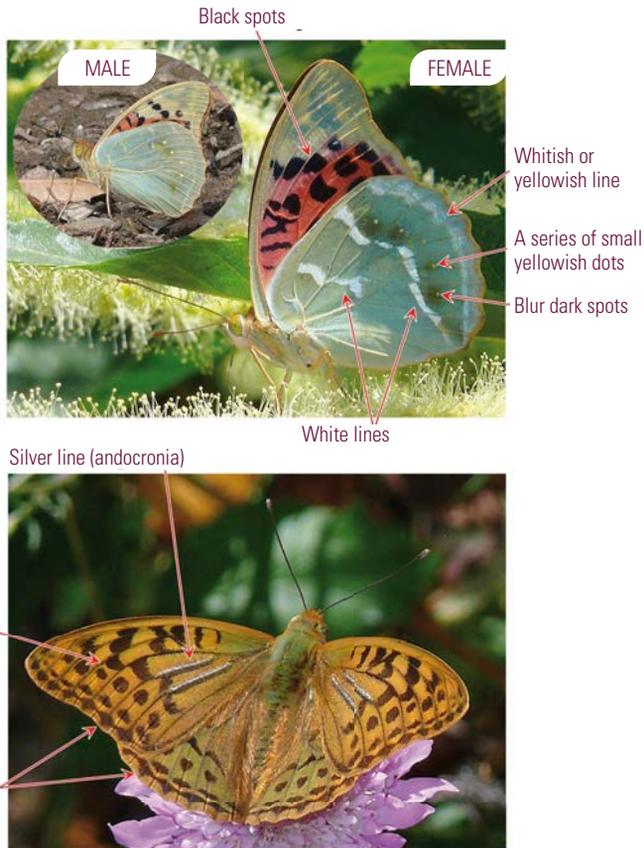
Cardial

Argynnis pandora (Denis & Schiffermüller, 1775)

DESCRIPTION

Wingspan: From 5.2 to 7 cm. **Closed wings:** The central part of the forewing is bright red. There are also large black spots, while the apex is greenish with yellowish spots. The hindwing is rather pale green, with a series of small yellowish dots, dark blur spots, and several white lines that go across the wing. These lines are broader in the case of female butterflies and narrower or absent in the case of male butterflies. **Open wings:** The background colour is orange with green shades, which are the more striking the older a butterfly is. There is a series of stretched diamond-shaped markings on the hindwings, and some large dots and dark spots on the rest of the wings. Male butterflies have rather prominent andocronia, which has a shape of two silver lines on the forewings.

KEY FOR VISUAL IDENTIFICATION





SIMILAR SPECIES

This species cannot be confused with any other thanks to its orange and greenish colour and diamond-shaped marking on the inner margins, and reddish forewings or green hindwings on the outer side of the wings, where we can also see white lines in the case of female butterflies and some small yellow spots.

BIOLOGY AND HABITAT

There is only one generation a year, but they emerge during a long period of time and live long lives in comparison with other species. The biggest part of population appears in June and July, and the luckiest ones live until October.

They live in the mountains, in forest surroundings and on well-preserved scrubland. They tend to spread, so they can sometimes be seen in mountain villages where they reproduce. Their caterpillars feed on violets, out of which *Viola odorata* and *V. alba* are the most common in Andalusia. Nevertheless, the former one is rare and the second one does not exist in Málaga, so the species probably feeds on *V. arborescens* and *V. demetria*.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

These butterflies can be often seen in Málaga's mountains, so the species must be more common along the path than it is said. They are likely to be found on all mountainous stages, similar to the Queen of Spain fritillary, and stretch between Nerja and Archidona, from the reservoirs to Estepona, and from Marbella to Alhaurín de la Torre. There might also be traces of some populations in the north of the province, above all along stages 13, 14, and 17.





Niobe Fritillary

Argynnis niobe (Linnaeus, 1758)

DESCRIPTION

Wingspan: From 4.1 to 5.8 cm. **Closed wings:** The inner zone of the forewing is orangey. It bears some black spots, while the apex is straw-coloured with orangey spots. The hindwing has a white or light green base. There is a series of white spots and a straw-coloured stripe in the middle of the wing with a series of orange eyespots. Some of them are small or absent. The spots on the hindwing margin have a black arch and orange colour above them. **Open wings:** The background is orange. There is a series of arches all along the hindwing margin. These are thin and pointed, and, usually, connected. We can also see some relatively small dots, and long spots on the central part of the wings.

KEY FOR VISUAL IDENTIFICATION



Light green base with orange spots

Series of white spots

Long spots

A series of orange eyespots
Yellowish stripe

A series of black and orange arches



A series of relatively small dots

A series of thin pointed arches

SIMILAR SPECIES

High Brown Frillary: When its wings are closed, the green background is opposite to the plenty of white or silver spots. The eyespots are also rather big. When it stretches the wings, the orange colour is brighter, and the spots and dots broader. The arches from the group on the hindwing margin are also wider, and some of them triangular or semicircular. They are normally not connected.



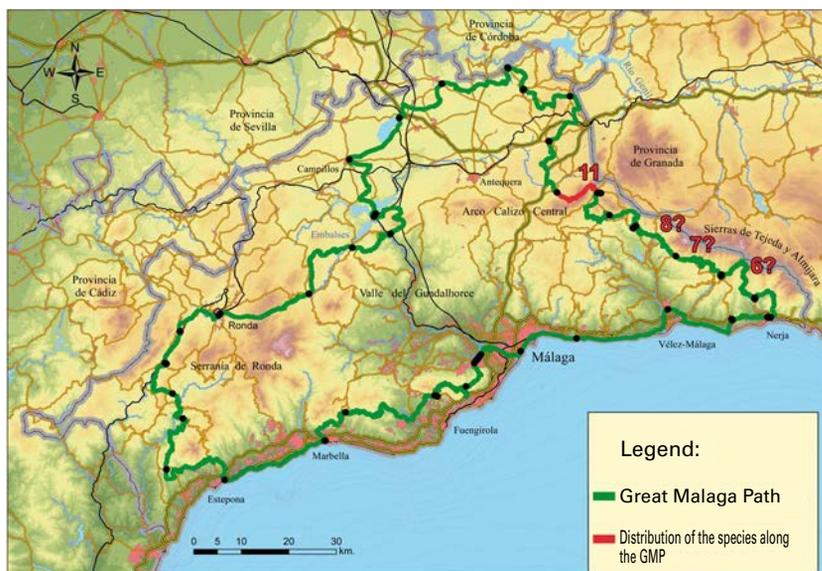
BIOLOGY AND HABITAT

It mostly flies in June and July, although it can also be seen in August. There is only one generation a year. It is present in well-preserved mountainous areas at an altitude that ranges from 860 to 1870 m. These butterflies prefer open areas, such as sparse woodland and scrubland, grassland or pasture. Their caterpillars feed on violets, out of which *Viola odorata* is the only one that exists in Andalusia. This plant is rare in Málaga, and can only be found on specific locations, which is why the caterpillars must be feeding on other species, like *V. arborescens* and *V. demetria*, which are the most common in this province.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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DISTRIBUTION

The species is rare and limited to specific places in Málaga or on the GMP, where it has only been spotted along stage 11. It is also present in the Tejada and Almijara Mountains, and it can probably be observed, at least some separated butterflies, on the routes in these mountains.





High Brown Fritillary

Argynnis adippe (Denis & Schiffermüller, 1775)

DESCRIPTION

Wingspan: From 4.8. to 5.8 cm. **Closed wings:** This species is big and the central part of the forewing is orangey with black spots, while the apex is the same as the hindwing, which is green with white or silver spots, and a series of orangey eyespots. **Open wings:** Their background is orange. There are series of arched, triangular and semicircular spots along the outer margin. They are normally not connected. There is also a series of not so large dots and wide spots.

KEY FOR VISUAL IDENTIFICATION



A series of orange eyespots

Series of white or silver spots

Wide spots



Series of not very large spots

Foto: Rafael Obregón Romero

Series of arched, triangular and semicircular spots

SIMILAR SPECIES

Niobe Fritillary: When its wings are closed, this species is not green, but whitish or straw-coloured with orangey spots. When it is open, it is usually lighter orange with smaller patterns and dots, and a series of thin pointed arches, which are linked on the hindwing outer margin.



BIOLOGY AND HABITAT

It flies in July and August, and takes one generation a year to do so. This species is not common in Málaga, as it has been spotted only once since it was registered for the first time in the 1970s in the province, more specifically, in Alcaucín in the Tejeda Mountains. In those times, it was spotted close to the streams, while today, it can be found at an altitude of 1560 m between pine trees and grassland, also in the Tejeda Mountains, but in the village of Sedella. Their caterpillars feed on violas (*Viola spp.*).

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DISTRIBUTION

This is one of the rarest species in Málaga, as it can only be found in two villages in the Tejeda Mountains. The species cannot be spotted along the GMP, though there might be some populations or isolated butterflies, above all in high zones of stage 6. We kindly ask you to inform us about spotting this species in Málaga, whether it is along or off the Great Málaga Path.



Old World Swallowtail





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BUTTERFLIES ALONG THE GREAT MALAGA PATH DESCRIPTIVE CATALOGUE

