



Malta

## Field Guide for the identification of butterflies

There are already thousands of volunteers across Europe who are monitoring butterflies for conservation purposes, collecting data on behalf of the Butterfly Monitoring Scheme (BMS) in various countries. In the Maltese Islands too, a national BMS has been set up, which includes volunteers taking part in the monitoring of butterflies.

This is a field guide for the identification of the Mediterranean butterflies which occur in Malta, with illustrations of the **more recognizable species** (some of which maintain small localized populations).

This guide has been designed to facilitate the identification of butterflies during monitoring carried out by volunteers participating in the European Butterfly Monitoring Scheme - eBMS. To find the complete list of Mediterranean butterflies in Malta visit the website [www.butterfly-monitoring.net](http://www.butterfly-monitoring.net)

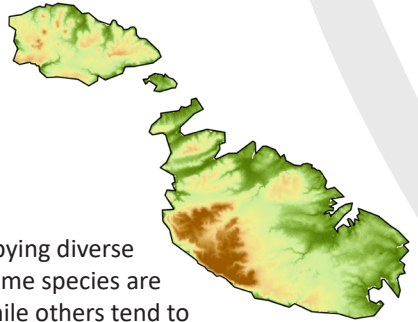
*Counting butterflies will help to protect them!*

## Malta

The Maltese archipelago consists of a small group of low-lying islands, located in the central Mediterranean area, east of the Siculo-Tunisian sill. The climate with dry hot summers and mild wet winters, has a profound influence on the Islands' biota, particularly in the distribution patterns of the vegetation. Under the present climatic regime, the islands do not support any perennial rivers or lakes, while the highest altitude is 253 metres amsl. The environment of the Maltese Islands is described as semi-natural, mainly as a result of a long human colonisation which led to a gradual modification of the terrain. The once extensive sclerophyll forests are nowadays limited to a handful of sites, largely fragmented, while the main biotopes comprise an array of garrigue (including phrygana) and steppic communities.

Secondary woodlands, consisting of both indigenous and archaeophytic maquis assemblages, occur in numerous valley systems and within boulder scree environments. A number of other habitats exist, such as riparian environments, sand dunes and marshlands, albeit, somewhat restricted in extent.

Butterflies are adapted to different environments occupying diverse habitat niches ranging from woodland to grasslands. Some species are known to 'hilltop' across significant tracts of terrain, while others tend to occupy relatively smaller habitat patches. Successful long-term colonisation rests upon the availability of resources; these include larval host plants, nectaring sources and a suitable habitat to sustain population viability.



## Why monitor butterflies?

Monitoring butterfly populations is an important method for measuring changes in the environment. It provides regular, standardised data to assess the conservation status of butterflies and produce *Butterfly Indicators* that can inform European environmental and agricultural policies. Collecting data for the monitoring scheme is an interesting and relaxing way to spend some of your spare time while helping to understand the conservation status of Maltese butterflies.

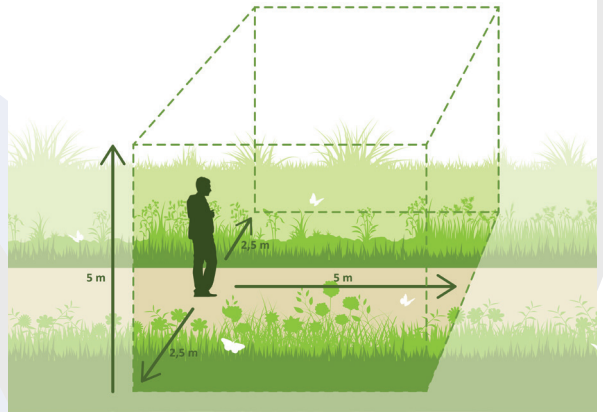
## Methodology to count butterflies

You can count butterflies in most places in Malta; in a park, garden, close to the shoreline, around wooded areas or on any paths and tracks. Every count is important. Within European BMS (Butterfly Monitoring Scheme) the most used methodology is counting butterflies along **transects**, basically, virtual fixed-routes where butterflies are recorded regularly (ideally once every one or two weeks) during the flight period. You can create your transect close to your house or work and visit it frequently.

Another option is to register butterflies through **15-min counts**, which consists of counting butterflies for 15 minutes in a given area. This can be a path, a delimited area (such as a garden) or simply a fixed point. Malta has a number of areas where butterflies can be counted during the day, with one or several 15-min counts. Counting butterflies contributes towards scientific knowledge, which in turn, supports conservation efforts.

### Basic rules to follow during butterfly monitoring:

- Count all butterfly species in an imaginary box, 2.5m to each side and 5m in front and above you (like in the picture)
- Walk your transect/route at a slow, constant pace
- The visits should be done during good weather: sunny and warm, with no rain and not too windy
- Report your records to the national coordinators or to eBMS



### Where to submit the data?

You can use the eBMS mobile application, **ButterflyCount**, to record 15-min Counts or transects. It can be installed on [Android](#) or [iOS](#) devices and allows the collection of butterfly counts from anywhere in Europe with an eBMS account (register on the website). Just enable your GPS and the app will record your route while counting butterflies.

If you want to help us counting butterflies, you can create an account on the eBMS website with the help of the BMS coordinator ([www.butterfly-monitoring.net](http://www.butterfly-monitoring.net)), and you can then start counting butterflies!



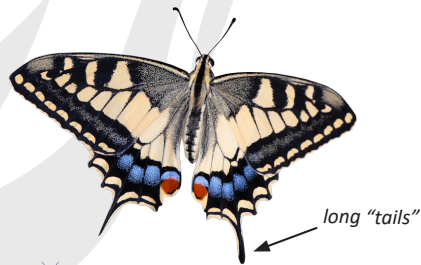
### How to use the Field Guide

In this field guide, you can find the pictures of the **30 butterfly species** that are known to occur in Malta, including species that are relatively prevalent and some that are considered vagrant (know from one to a few individuals).

The butterfly species are organized into 5 families (see the page margins). Every butterfly species has both a common English and scientific name (written in *italics*). Information is included for each species' flight period, size category, and occurrence status (see the legend on the back cover of the Field Guide). Butterfly identification is often best done using photographs. Check the diagnostic characteristics highlighted with arrows or circles and remarks to help you with the identification. The flight period bar shows the shaded months when the species can be seen. For some species, this information is not included due to the few records that have been reported; therefore, the probability of encountering them is unlikely.



Swallowtail - *Papilio machaon*



J	F	M	A	M	J	J	A	S	O	N	D
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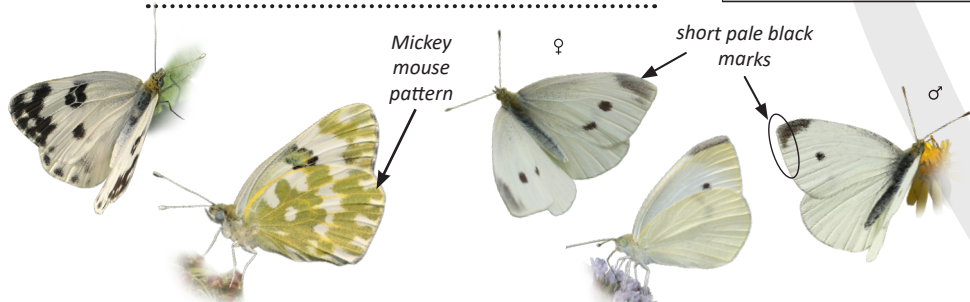


Green-Striped White  
*Euchloe beleimia*

Accidental (known from 2 records)



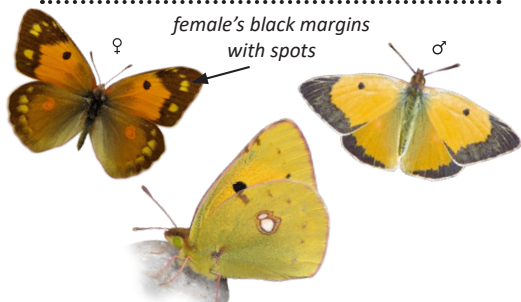
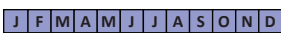
Large White - *Pieris brassicae*



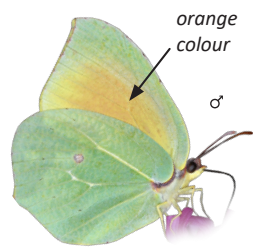
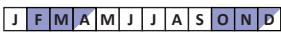
Bath White - *Pontia edusa*



Small White - *Pieris rapae*



Clouded Yellow - *Colias crocea*



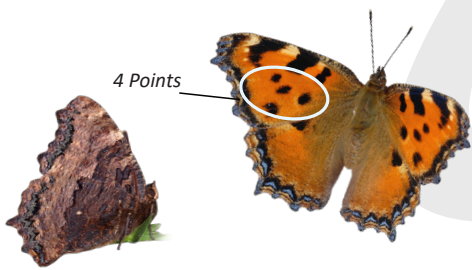
Cleopatra - *Gonepteryx cleopatra*



Southern Comma - *Polygonia egea*



Accidental (only 2 records)



Large Tortoiseshell - *Nymphalis polychloros*



Accidental (only 1 record)



sooty brown with  
orange/yellowish  
spots



Speckled Wood - *Pararge aegeria*



J F M A M J J A S O N D

orange with brown  
markings



Wall Butterfly - *Lasiommata megera*



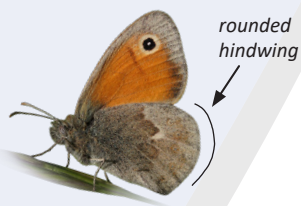
J F M A M J J A S O N D



Meadow Brown - *Maniola jurtina*



J F M A M J J A S O N D



Small Heath - *Coenonympha pamphilus*



J F M A M J J A S O N D



Red Admiral - *Vanessa atalanta*



J F M A M J J A S O N D

several ocelli  
"eyes"



Painted Lady - *Vanessa cardui*



J F M A M J J A S O N D



Blachier's Grayling - *Hipparchia blachieri*



Accidental (only 3 records)

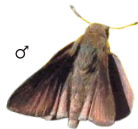


Plain Tiger - *Danaus chrysippus*



J F M A M J J A S O N D

♂



♀


Pigmy Skipper - *Gegenes pumilio*


J	F	M	A	M	J	J	A	S	O	N	D
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Green Hairstreak - *Callophrys rubi*

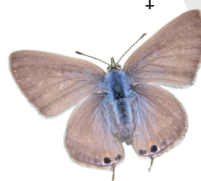

Accidental (only 1 record)

broad white  
band on  
hindwing  
underside


♂



♀


Long-Tailed Blue - *Lampides boeticus*

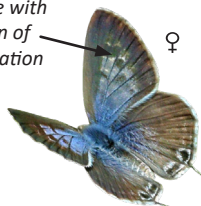

J	F	M	A	M	J	J	A	S	O	N	D
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light brown  
with wavy  
white lines

♂


female: blue with  
a suffusion of  
dark colouration

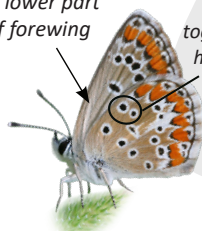
♀


Lang's Short-Tailed Blue - *Leptotes pirithous*


J	F	M	A	M	J	J	A	S	O	N	D
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contrasting  
orange and  
greyish-brown  
colour

spot missing  
on lower part  
of forewing

two spots  
close  
together on  
hindwing

Small Copper - *Lycaena phlaeas*


J	F	M	A	M	J	J	A	S	O	N	D
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Brown Argus - *Aricia agestis*


J	F	M	A	M	J	J	A	S	O	N	D
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Velvet-Potted Blue - *Azanus ubaldus*



Recently established



Dark Grass Blue - *Zizeeria karsandra*



J F M A M J J A S O N D



Geranium Bronze - *Cacyreus marshalli*



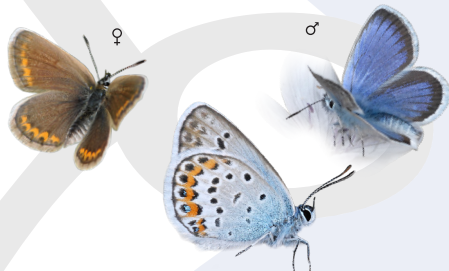
J F M A M J J A S O N D



Holly Blue - *Celastrina argiolus*



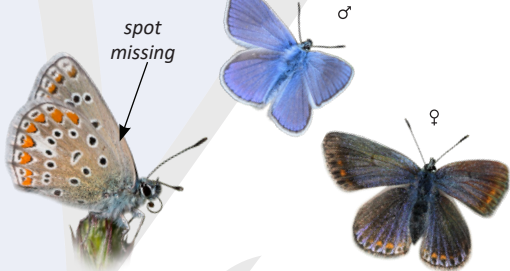
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Silver-Studded Blue - *Plebejus argus*



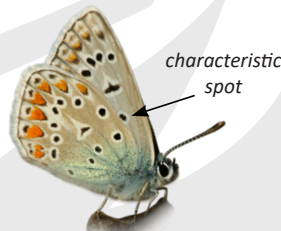
Accidental (only 1 record)



Chapman's Blue - *Polyommatus thersites*



Accidental (only 2 records)



Southern Blue - *Polyommatus celina*



J F M A M J J A S O N D



Butterfly Conservation Europe and the UK Centre for Ecology and Hydrology (UKCEH) formed the **European Butterfly Monitoring Scheme (eBMS)** to bring together data from different Butterfly Monitoring Schemes of Europe. All member countries share their data annually to the eBMS database, to analyse and produce the population trends of the European butterfly species and European Butterfly Indicators.

Visit the eBMS website, [www.butterfly-monitoring.net](http://www.butterfly-monitoring.net) to find out more information about butterfly monitoring and how to submit your butterfly data. If you want to help us count butterflies, contact the national coordinator: Prof. Louis F. Cassar [louis.f.cassar@um.edu.mt](mailto:louis.f.cassar@um.edu.mt) at the Institute of Earth Systems at the University of Malta or to [butterflymonitoring@um.edu.mt](mailto:butterflymonitoring@um.edu.mt)

This guide was funded by DG-Env (European Commission) under the SPRING service contract. It can be found and downloaded from the eBMS website:

[www.butterfly-monitoring.net/field-guides](http://www.butterfly-monitoring.net/field-guides)

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eBMS - European Butterfly Monitoring Scheme  
SPRING - Strengthening Pollinator Recovery through Indicators and monitoring



Occurrence Status: ● Native ● Alien  
● Migrant

The butterfly flight periods were selected based on Cassar, L. F. (2018). *A revision of the Butterfly Fauna (Lepidoptera - Rhopalocera) of the Maltese Islands*. Naturalista Sicil., S. IV, XLII (1), pp. 3-19. Palermo.

Flight period: months when butterflies are seen

J F M A M J J A S O N D

Butterfly size:

 Small  Medium  Large

Sex:

♀ Female ♂ Male

Other symbols:

→ ○ Specific characteristics to identify the species



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UK Centre for  
Ecology & Hydrology



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