





European Butterflies Group

Identification Guide to the Polyommatinae Group of 'Blues' and 'Arguses' in Europe

Part 1: The Commoner Species

Designed by Bill Raymond

For more information on all aspects of European butterflies please go to european-butterflies.org.uk

The other free to download guides in this series are available at **EBG Identification Guides**

How to use this Guide

Introduction

Please read the Introduction which gives some background to the difficulties of identifying Polyommatinae.

List of Species

If you wish to go direct to a Species Profile go to the list of Species Covered by this Guide.

Explanation of Terms used

Familiarise yourself with the simplified terminology used in this guide. This link explanation of these terms is provided for easy reference on every page.

Terms 🔷 to the

For simplicity, common English names have been used in the text where possible and in some instances the scientific conventions on the use of italics may not have been strictly followed.

Upperside Key

For a definitive identification of many 'Blues' it is usually necessary to have a view of both upper and underside, especially the latter. Due to the variation in most species and the colour rendition of photographs a definitive identification by upperside only is not possible in many cases. The Upperside Key must therefore be viewed as imprecise but useful when employed in conjunction with the Underside Key to achieve an identification.

UNDERSIDE Key The identification process should start with the Underside Key which is the Master Key. To work most effectively this requires a clear view of both the underside hind and fore-wing, the latter often being partly hidden which can obscure important features. When using the Key it is important that each feature from 1 to 8 is checked in sequence as instructed. This may seem tedious at first but after using it several times the process will become quick and straightforward as you become familiar with the features. The Key will hopefully reduce the possibilities or lead you to a Species Profile where you can make a comparison to confirm identification.

Species Profiles

Each of the Species Profiles tries to describe and illustrate a 'typical' specimen. Keep in mind that: [i] there is considerable variation and in some cases the illustrated specimen may not exactly match the description in the text. This is because the illustration is chosen **to show the key identification features**; [ii] very often, several underside marks and not just the key features need to be compared for a confident identification; [iii] in some cases it may only be possible to identify a specimen by capture, a practice which should only be undertaken by skilled observers with the appropriate authorisation. The arrangement and order of the Species Profiles is designed, where possible, to have species which are difficult to separate on the same or adjoining pages to facilitate comparison.



This symbol indicates guidance notes to help identification when [i] there are similar species which might confuse, [ii] you have keyed to a point [due to variation in species or other factors] where your specimen does not seem to fit.

Species Links

Useful links to facilitate reference to a Species Profile are provided by clicking on an <u>underlined species name</u> or by clicking on a species title box, e.g.

Common Blue

Brown Argus

How to use this Guide cont'd

Distribution Maps

Detailed distribution maps for each species can be found at the end of the guide. See <u>Appendix</u> for details of the geographical area covered. A link to the maps is included on each page.

NOTES: [a] Similar 'local' species: Information on these species is included in the Species Profile where appropriate to help in case of doubt about identification. The 'local' species will be dealt with in detail in the second part of this guide.

[b] Flight period and size: These are very variable and have only been included where they may be helpful in identification.

[c] Colour: The depth of colour seen on a butterfly is dependent on the intensity of the light and the angle at which the specimen is viewed. This means that blue scaling can appear as light blue, dark blue, silvery blue and all colours in between. Similarly, orange markings can appear yellowish or red. Brown can also be light or dark. Ageing, wear and loss of scales will also affect the look of a butterfly. Colour can therefore, in many instances, be inconsistent and unreliable for identification purposes and is little used in this guide as a comparative feature. It is mentioned ONLY where it is considered consistent and helpful.

[d] Some familiar identifying features which are frequently cited in other identification guides have not been included due to these features being considered inconsistent and therefore unreliable.

[e] The term 'this guide' refers to this document, i.e. Part 1 of the Guide to Polyommatinae, and the 'commoner' species it covers.

Species that might be confused with the 'Blues' and 'Arguses'

The Polyommatinae group of 'Blues' and 'Arguses' featured in this guide are small brown and blue butterflies the majority of which are unlikely to be mistaken for species outside of this group. Nevertheless, the brown upperside of some 'Blues' and 'Arguses' [mostly females] might possibly be confused with the uppersides of other Lycaenidae species. Fortunately, a view of the underside should remove any doubt. The uppersides of these superficially similar looking species are illustrated below for comparison. Please refer to other sources for more information if necessary.

Sooty Copper [Lycaena tityrus] male



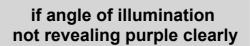
subspecies subalpinus



Purple-edged Copper [Lycaena hippothoe] subspecies eurydame



Purple Hairstreak [Favonius quercus]







Note: Some of the other 'Hairstreaks' also have brown uppersides which might initially be confused on the wing. However, they usually rest with wings closed giving an underside view which should remove any doubt.

Introduction

The English term 'Blues' is generally applied to a group of butterflies which are in many instances immediately recognisable by their colour and generally small size. This is the Polyommatinae group of Lycaenidae. In the area covered by this guide, i.e. Europe up to the eastern boundary of the European Union, this group consists of approximately 90 species, many of which are very local in their distribution. To simplify the identification process by creating a workable Key this guide covers those species which are relatively widespread and most likely to be encountered. These will be referred to as the 'Commoner Species'.

The remaining species, styled the 'Local Species', will be dealt with in Part 2 of this guide which is in course of preparation. If uncertainty exists about identification as one of the 'Commoner Species' here in Part 1 then you are referred to the most likely members of the 'Local Species' which can be investigated in other literature. Once Part 2 is published then a complete guide bringing the 'Commoner' and 'Local' species together will also be made available by the European Butterfly Group.

The Polyommatinae are a difficult and confusing group to identify. They are prone to variation which exacerbates the difficulties plus, in many cases, several similar species can fly together. The uppersides of the majority of Polyommatinae males are noticeably blue or a shade of blue/silvery blue with most females usually brown with some degree of blue scaling. Confusingly, however, some males are brown and the more widespread of these species are known as Anomalous Blues and Arguses.

The undersides of both sexes of Polyommatinae are generally similar apart from the females generally being browner with bolder marks. The markings on the underside are in many cases the key to differentiating the species and it is often the case that one mark alone is not sufficient, with a combination of marks being necessary for a 'confident' identification. Although the underside is normally the only reliable way to identify the 'Blues' an imprecise upperside key is included to assist if a restricted view or no underside view is available. Female uppersides are especially difficult to separate and attempting this by use of photographs is often a case of choosing the most likely possibility. Thus, in many instances a view of both upper and underside is required.

Whilst designing this guide I scrutinised hundreds of photographs to try and find 'typical examples' of each species but soon realised that there is really no such thing, every butterfly is a unique individual. So, to achieve an illustration of a specimen with the key identification features clearly displayed, a number of the photographs had to be manipulated. When it comes to identifying butterflies by sight there are very few hard and fast rules. For butterflies - variety is the spice of life!

Explanation of terms used

For a positive identification of 'Blues' it is generally necessary to closely examine the markings on the upperside and the underside. The diagrams below explain the simplified terms used in this guide to describe the distinguishing features. Click here for links to all Species Profiles.

UPPERSIDES

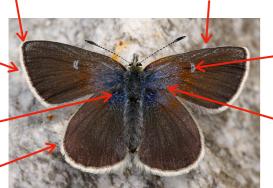
Apex of the wing

Costa: leading edge of the wing



Basal: area at the base of the wing

HInd-wing

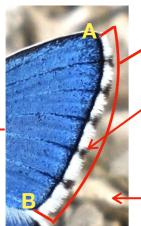


Fore-wing cell mark

Blue scaling or dusting: an area of the upperside where blue scales are mixed with the dark ground colour scales



Androconial patch: an area of the MALE wing covered by androconia [scent scales for attracting females]. They usually create a noticeable patch on the fore-wing.



Fringe: the outermost part of the wing. Generally white and sometimes [as shown here] with **Fringe lines:** dark projections of the veins into the fringe.

<u>Click here</u> for more information.

Wing border: dark margin to the outer edge of the wing adjacent to the fringe, i.e. the dark line from A to B.

Submarginal marks: rows of marks found adjacent to the **wing border** on either or both fore and hind-wing







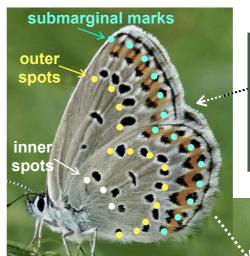
Veins: tiny tubes supporting the wing, radiating out across the wing from the wing base. Sometimes the veins are very visible, either bright or dark.

Vein darkening usually starts here at the wing border and runs part or all of the way to the base of the wing.



UNDERSIDES

[males and females usually have similar markings]



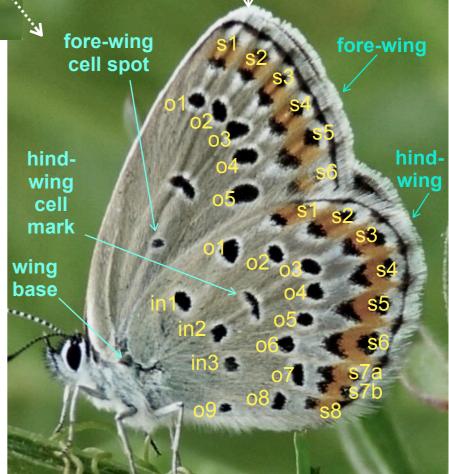
There are three main bands of marks and spots between the veins on the underside fore and hind-wing. Starting from the base of the wing outwards they shall be referred to as inner spots, outer spots and submarginal marks. They are numbered as shown in the diagram below.

s = submarginal marks

o = outer spots

in = inner spots

Note: Spot numbering is from top of the wing downwards - the reverse to that used in many other guides which count upwards. From photos it is usually difficult to see the first vein or spot at the bottom of the wing. Counting upwards to check position can thus be problematic.



The terms **inner** and **outer** are used to indicate nearer to and further from the base of the wing respectively.

Species covered by this Guide

If you wish to bypass the Identification Keys and go directly to a detailed Species Profile click on the species name below.

Adon	is Blue	ILvsandra	bellargus1

Amanda's Blue [Polyommatus amandus]

Black-eyed Blue [Glaucopsyche melanops]

Chapman's Blue [Polyommatus thersites]

Common Blue [Polyommatus icarus]

Eros Blue [Polyommatus eros]

Geranium Argus [Eumedonia eumedon]

Green-underside Blue [Glaucopsyche alexis]

Iolas Blue [Iolana iolas]

Long-tailed Blue [Lampides boeticus]

Northern Brown Argus [Aricia artaxerxes]

Reverdin's Blue [Plebejus argyrognomon]

Silver-studded Blue [Plebejus argus]

Southern Brown Argus [Aricia cramera]

Turquoise Blue [Polyommatus dorylas]

Alcon Blue [Phengaris alcon]

Anomalous Blue [Polyommatus admetus]

Brown Argus [Aricia agestis]

Chequered Blue [Scolitantides orion]

Cranberry Blue [Agriades optilete]

Escher's Blue [Polyommatus escheri]

Geranium Bronze [Cacyreus marshalli]

Holly Blue [Celastrina argiolus]

Lang's Short-tailed Blue [Leptotes pirithous]

Mazarine Blue [Cyaniris semiargus]

Osiris Blue [Cupido osiris]

Ripart's Anomalous Blue [Polyommatus ripartii]

Silvery Argus [Aricia nicias]

Southern Common Blue [Polyommatus celina]

Alpine Blue [Agriades orbitulus]

Baton Blue [Pseudophilotes baton]

Catalonian Furry Blue [Polyommatus fulgens]

Chalkhill Blue [Lysandra coridon]

Damon Blue [Polyommatus damon]

Furry Blue [Polyommatus dolus]

Glandon Blue [Agriades glandon]

Idas Blue [Plebejus idas]

Large Blue [Phengaris arion]

Meleager's Blue [Polyommatus daphnis]

Provençal Short-tailed Blue [Cupido alcetas]

Short-tailed Blue [Cupido argiades]

Small Blue [Cupido minimus]

Southern Mountain Argus [Aricia montensis]

Zephyr Blues: Alpine / Balkan / Spanish [Kretania trappi / sephirus / hesperica]



UNDERSIDE
Identification Key



UNDERSIDE Identification Key

Note: Male and female markings are usually similar with females more likely to have darker marks/colouration. See Species Profiles for exceptions.



START HERE

by looking at each of the features below IN SEQUENCE. When you find a match follow the link[s].

Keep in mind that there is great variation and these features may not always be present. Click here or above for an Explanation of Terms used.

Are there small thin tails on the hind-wing like this?



If YES, click here to go to Group A

OR like this?



Are there NO orange marks on the fore-wing and a prominent submarginal orange mark in s6 on the hind-wing like this?



If YES, go to



Cranberry Blue

like this, with large white marks around faint black spots on the hind-wing?





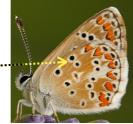


Glandon Blue

3

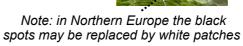
Is there a colon punctuation mark shape [formed by spot o1 and displaced spot o2] like this on the hind-wing?







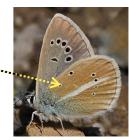
Northern Brown Argus





OR

Does the hind-wing have a moticeable white stripe like this?



If YES, click here to go to Group B

5

Are there
noticeable dark
fringe lines on
both wings
like this?



OR like this?



If YES, click here to go to Group C



Are there blue/silver scales visible in any of the submarginal marks on the hind-wing as shown here?





If YES, click here to go to Group D

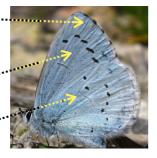
7

Are there
NO orange
submarginal
marks on
either fore or
hind-wing?

and with these features Fore-wing dark fringe lines

Spots elongated not round

Spots have NO .. pale surrounds



If YES go to

> Holly Blue

with large all white marks on hind-wing like this?

OR



If YES go to

Alpine Blue



If YES, click here to go to Group E

8

If your specimen does not match any of the above 7 features then look to see if there is a visible cell spot present on the fore-wing as shown here?



Sometimes the cell spot is partly hidden and is just visible like this?



If YES, a fore-wing cell spot is present, then go to

Common Blue

Eros Blue

OR

like

this?

for a detailed comparison

If **NO**, or if cell spot is indiscernible and you cannot be sure, then click here to go to Group F

UNDERSIDE KEY cont'd

Note: Male and female markings are usually similar

Group A

Small thin tails on the hind-wing

Does the overall wing pattern resemble a series of stripes or wavy lines?



bold

fringe

lines

dark mark

in s2

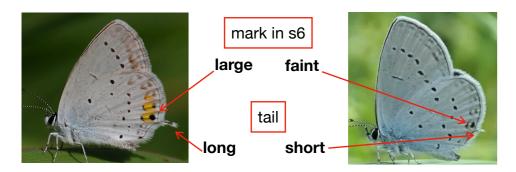
Maps





Short-tailed Blue

Provençal Short-tailed Blue



Separate these two species by: [i] the mark in s6 - Short-tailed has a large orange mark and, sometimes, additional orange marks in s4 and s5 [as shown above], Provençal has a faint mark with no significant orange [ii] the length of tail - Short-tailed has a prominent tail, Provençal tail is short, sometimes vestigial.

■ NO · YES ▶

Long-tailed Blue



Distinctive white band on hind-wing will distinguish from Lang's and Geranium Bronze.

Lang's Short-tailed Blue



Differentiate from Long-tailed and Geranium Bronze by: [i] **Dark stripe** near front edge of fore-wing

[ii] Dark mark in s2.

Geranium Bronze



Geranium Bronze easily distinguished from Longtailed and Lang's having:
[i] none of their characteristic features illustrated opposite,
[ii] bold fore-wing fringe lines

Group B

Noticeable white stripe on the hind-wing

Are there any orange submarginal marks on hind-wing?

NO

The undersides of these three species can be difficult to separate. Look for the features below to help make an initial identification, then use the links to the detailed Species Profiles to try and confirm.

white

Ripart's Anomalous Blue

brownish

fringe

row of hind-wing outer spots

continues to bottom of wing

Ripart's distinguishable from Damon by:

[i] the colour of the fringe - Ripart's is brownish

and Damon is white, [ii] the hind-wing outer

spots - Ripart's has slightly darker black spots

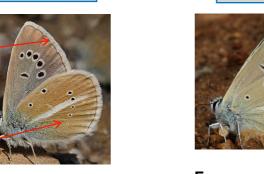
extending further down the wing.

usually finishes here

Damon is widespread and the most likely to be encountered

Note: These three species have: [i] the white stripe on both males and females, [ii] different coloured MALE uppersides which are easily distinguished from one another.

Damon Blue



Furry usually looks somewhat paler than Ripart's and Damon. Can be differentiated from Ripart's by its white fringe.

Furry Blues

Note: **Stripe can be absent** on some races of Furry Blue

: YES

Silvery Argus



below cell mark

pelow cell mark and through spot o4

Geranium Argus



cell mark and

from cell mark and between spots o3 and o4

Both males and females of these species have the white stripe. They can be separated by **the stripe's position** as illustrated above. Sometimes the orange marks on Silvery Argus can be faint [as shown above] but they are still usually visible.

Position of

stripe

UNDERSIDE KEY cont'd

Note: Male and female markings are usually similar

Group C

Noticeable dark fringe lines on both wings





Are the fringe lines very bold, becoming like large marks?

Adonis Blue



These two species have similar undersides

with females sometimes indistinguishable. The colouring is

For a detailed comparison go to the Species Profiles.

The markings on Adonis are generally bolder than Chalkhill.

variable on both species with males frequently paler than females.

A view of the **quite different male uppersides** will readily differentiate.

Chalkhill Blue



YES >

Fringe Lines

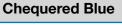
Fringe lines can be faint, especially on the hind-wing, but on these four species they are usually complete, i.e. reaching or present close to the outer edge of the fringe. This is unlike other species where there may be only a partial projection into the fringe from the vein end.

Baton Blue



NO orange marks in s1 and s2

> orange marks present





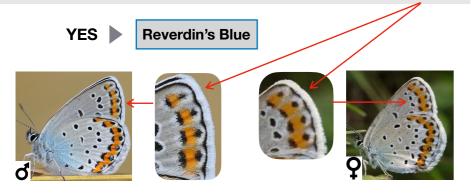
On these two species the fringe lines are very bold, becoming large marks. Distinguish from one another by the orange submarginal marks on the hind-wing: Baton has NO orange marks in s1 and s2 whilst Chequered has a complete band of orange marks.

Group D

Blue/silver scales in hind-wing submarginal marks

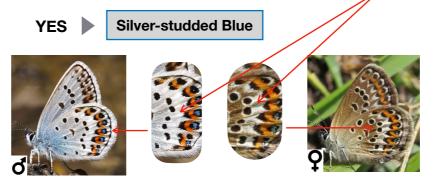
The undersides of the three species in this group are superficially similar and can be difficult to separate. Use the preliminary notes/comparisons below to help make an initial identification for your butterfly. Then use the links to refer to the Species Profiles where detailed comparisons of the three species can be consulted.

Is there a complete row of orange marks on fore-wing here?



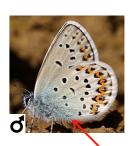
There is normally a complete row of submarginal orange marks on the underside fore-wing of both males and females even though these may fade in colour towards the top of the wing. This will usually differentiate male Reverdin's from Idas males and Silver-studded males

Is there a noticeable white band on the hind-wing here?



The presence of a noticeable white band inside the submarginal marks on the hind-wing can help to distinguish males and females from Reverdin's. This white band is usually more marked on females due to their darker ground colour.

Idas Blue





There is usually little noticeable blue scaling on the hind-wing. This is often one of the best ways of distinguishing male Idas from male Silver-studded Blue.





Note: Cranberry Blue usually has blue/silver scales in its hind-wing submarginal marks but is easily identified having: [i] this **prominent submarginal orange mark in s6,** [ii] **no orange marks** on the fore-wing.

UNDERSIDE KEY cont'd

Note: Male and female markings are usually similar

Group E

NO orange submarginal marks on fore or hind-wing



Maps



Terms 🔷

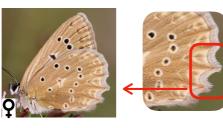
The undersides of the ten species in this group are superficially similar and they can be difficult to separate. First try to match your butterfly to one of the four numbered key features below then use the notes/comparisons to help identify the most likely candidate. If none of these four features seem to apply then look at the remaining two species, Anomalous and Mazarine, in the last section overleaf. Finally, use the links to the Species Profiles to try and confirm.

Are there noticeable indentations on bottom edge of the hind-wing?

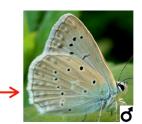
Meleager's has **distinctive** indentations or scallops at the bottom edge of the hind-wing, around the submarginal mark s3. These are less pronounced on males. See opposite.

Large Blue





Indentations or scallops



Noticeably **SMALL**? 2

YES

Click here for

Small Blue

Osiris Blue

on next page

Noticeably LARGE?

3

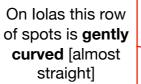
Alcon Blue



Compare the three species below

Alcon and **Large Blue** may be confused with **lolas**. Differentiate by **position of** fore-wing outer spots as shown below.









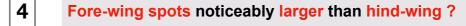
On Alcon and Large Blue this row of spots is distinctly curved with spot o5 [arrowed yellow] noticeably further from the outer wing edge than spot o4 [arrowed green]

lolas can also be distinguished from Alcon and Large Blue by: [i] a usually very pale underside [ii] its close association with the main foodplant, Bladder Senna [Colutea arborescens]

Alcon v Large Blue

Usually distinguished from one another by the Large Blue's noticeably larger and bolder markings

lolas could possibly be confused with the two species opposite. Look for these differences: [i] Black-eyed Blue: lolas has a less curved [almost straight] row of fore-wing outer spots [ii] Green-underside Blue: lolas usually appears noticeably larger and has no green blue flush.



Compare the two species below

Black-eyed Blue

Black-eyed and Green-underside may be confused. Separate using the features illustrated below.

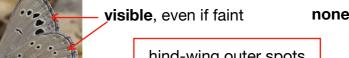
Greenunderside Blue



fore-wing outer spots 4 & 5

5 further inwards in line

submarginal marks

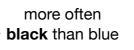


hind-wing outer spots normally usually **small**,

complete

basal flush

vestigial or absent



greenish blue



Also consider:

Underside colour: Black-eyed usually browner than Green-underside

Distribution: Black-eyed restricted to southwestern Europe

UNDERSIDE KEY cont'd

Note: Male and female markings are usually similar

Group E cont'd

NO orange submarginal marks on fore or hind-wing



Maps



Small and

Osiris Blue

Terms

2 cont'd

Noticeably SMALL?



Compare Osiris Blue and Small Blue

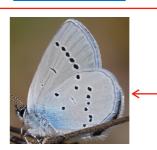
Osiris and Small Blue are **markedly smaller** than the other species in this Group. They have **similar undersides** which are almost **indistinguishable**. Differences in the underside spot pattern are frequently cited but these can be unreliable. The points below may help to separate the two species:

- [i] Size Osiris is usually slightly larger than Small Blue
- [ii] Upperside colour Osiris male is a bright blue whilst
- the Small Blue male and female are **brown/grey**.
- [iii] Underside Usually more basal blue on Osiris.
- [iv] **Foodplant** Osiris has a **much closer association** with its foodplant **Sainfoin** than Small Blue which feeds on Kidney-vetch.

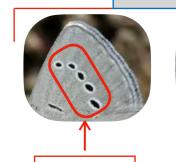
Small Blue



Mazarine Blue



Osiris Blue



This row of

fore-wing

spots is

gently

curved

Both Osiris and Small Blue have the

pattern of underside fore and hind-wing

Hind-wing spot o2 is well below a straight line [shown green] drawn between spots o1 & o3

Osiris and Small could be confused with Mazarine [see below]. However Osiris and Small are **both**: [i] **generally smaller** and **paler**,

[ii] usually distinguished from Mazarine by the outer spots on both underside wings. See this comparison

Remaining two species [with NONE of the key features 1 - 4 above]

Anomalous Blue



The Anomalous and Mazarine Blue could be confused. They can usually be distinguished from one another using the features below.

hind-wing outer spot 2

in a straight line with outer spots 1 & 3

just below a straight line between outer spots 1 & 3

hind-wing submarginal marks

usually some perceptible marks

normally none visible

Possible confusion with:
Osiris and Small Blue [see above] but Mazarine Blue usually larger with a darker underside. Distinguish by comparing the outer spots on both underside wings.

See this comparison.

This row of fore-wing spots is **distinctly curved** with spot o5 [yellow arrow] further from wing edge than spot o4 [green arrow]

spots shown above which is quite different from those of the Mazarine Blue below



Hind-wing spot o2 is just below a straight line [shown green] drawn between spots o1 & o3

Mazarine Blue

Upperside colour

Anomalous male upperside is brown whilst Mazarine male is blue

?

If you are in doubt identifying your butterfly here in Group E you may have keyed through to this page because:



[i] The white stripe seen on the Furry Blues in Group B is absent or very faint in the races found in south east France, Italy and Catalonia,



[ii] The tail on the Provençal Short-tailed Blue in Group A can be hard to see due to wear.

These two species should therefore be considered.

UNDERSIDE KEY cont'd

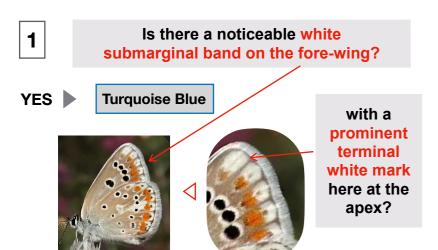
Note: Male and female markings are usually similar

Group F

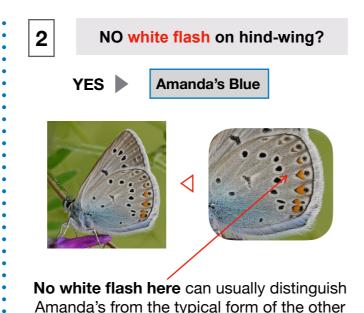
NONE of the key features 1-7 on the starting page and with NO fore-wing cell spot

Maps **Terms**

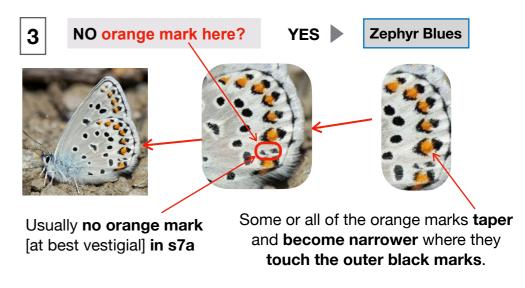
If you have keyed to this point and can be certain there is **no cell spot** on the underside fore-wing of your butterfly then it is likely to be one of the five species below. Look for each of the features numbered 1 to 3 below in sequence which may identify your butterfly. If **none** of these features seem to apply then it is probably one of the remaining two species, Chapman's or Escher's, which are compared in the last section below. Finally, use the links to go to the detailed Species Profiles to try and confirm identification.



Predominance of white in the fore-wing submarginal band gives the Turquoise Blue underside a distinctive appearance quite different from the other species in this group.



species in this group except Zephyr [see right]

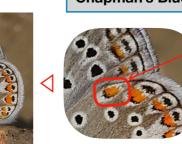


The **two features above** should distinguish Zephyrs from the other species in this group. Zephyrs also have a more restricted distribution.

Remaining two species [with NONE of the features 1 - 3 above]

If your butterfly does not match 1, 2 or 3 above then it is probably Chapman's or Escher's which can be very difficult to separate. Look for the presence/absence of an orange mark in s1 for a preliminary identification as shown opposite. For a detailed comparison go to the Species Profiles.





Chapman's Blue Look for orange mark here Usually present





Usually

absent



If the presence or absence of a fore-wing cell spot cannot be confirmed then consider:

Common/Southern Common and Eros [which typically have a fore-wing cell spot], keeping in mind that the features of the Group F species shown above help to separate those species from one another and **not** to distinguish them from Common/Southern Common and Eros. See Species Profiles for a detailed comparison.



If you are in doubt identifying your butterfly here in Group F you may have keyed through to this page because:

[i] **The silver scales** on the species in Group D are **sometimes not visible** due to the angle of lighting/viewing. Some of these Group D species, which all have no fore-wing cell spot, should therefore be considered as possibilities. Click here to go to Group D.

[ii] Sometimes the fringe lines on Adonis and Chalkhill are very faint or absent and the fore-wing cell spot [present on both species] is not visible. That may be the case with your butterfly thus making both species possibilities. Click here to go to the Species Profiles for detailed comparisons.



UPPERSIDEIdentification Key



Start here

Does your butterfly look like or have any of the distinctive features illustrated below?



Small tails on the hind-wing like this?

If YES click here







Colouration and hindwings noticeably scalloped like this?

If YES click here







Mainly blue or half blue/ brown with bright orange marks on the hind-wings like this?

If YES click here





If the above features don't apply then decide which description below fits your butterfly and follow the links. Keep in mind that: [i] for a definitive identification of many Blues upper and underside views are necessary, [ii] there is great variation and these features may not always be present. Click here for an Explanation of Terms used.



Is your butterfly predominantly



Is it ALL

below?

BRIGHT, DARK or SILVERY BLUE* in colour

And does it have a relatively NARROW/THIN dark wing border like this?





If YES, click here to go to **Group 1**

OR

Does it have a relatively WIDE/BROAD dark wing border [either on BOTH fore and hind-wing or ONLY on the fore-wing]

OR



WITHOUT

any prominent spots or submarginal marks like this?





If YES click here to go to Group 2

WITH

some distinguishable [or very obvious] submarginal marks and/or spots/marks like this?







If YES click here to go to Group 3

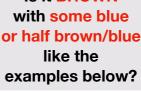
BROWN* in colour

And does it have noticeable ORANGE MARKS* on the HIND-WING?

BROWN like the examples

OR

NO



If YES click here







If YES click here to go to Group 4

YES Is it **BROWN**

And is it like one of the examples below?







If YES click here to go to Group 6



а

Small hindwing tails The five species with tails and their distinguishing features are described below. Comparing your butterfly with these may provide useful pointers as to its identity. If in doubt, follow the links and refer to the Species Profiles.

Short-tailed Blue

These two species have similar uppersides. The features illustrated below are variable but may help to separate. An underside view will confirm identification.

Provençal Shorttailed Blue



Occasionally has a small faint cell mark [as shown]

Poorly defined dark border which can appear broader than Provençal

fore-wing cell mark

MALES

dark wing border

hind-wing

submarginal marks

Rarely visible

Sharply defined dark border



Sometimes has a distinct, complete row of small marks [as shown]

MALES & FEMALES

length of tail

shorter tail, sometimes vestigial

Frequently has a single prominent

mark on outer side of tail [as shown]



prominent tail

Mainly black ageing to brown with SOME degree of basal blue dusting

Normally has an orange mark close to the tail

FEMALES

colour Black/dark brown, usually with NO basal blue dusting

hind-wing submarginal marks

blue dusting

NO marks



Lang's Shorttailed Blue This species usually rests with wings closed meaning the upperside is rarely seen.



The male upperside is similar to that of Short-tailed and Provençal males.

An underside view easily separates from these two species.



Female is readily identified by its large vague spots on the forewing. Also usually has blue basal dusting and two dark submarginal marks close to the tail.





The similar brown males and females are easily distinguished from the other species with tails by the distinctive bold fringe lines, especially on the fore-wing.

Geranium Bronze



The male and female uppersides are usually







differentiated from the other species with tails by the one or two [sometimes there are more] **prominent, roughly circular dark submarginal marks with white outlines** close to the tail. Examples are shown in the photographs above. The boldest of these marks is normally the one on the outer side of the tail.



Maps



Terms 🔷



Hind-wings noticeably scalloped

Meleager's Blue [female]





Female Meleager's is readily identified by its distinctive black veins and markings plus the deep indentations or scallops on the hind-wing. Females have two forms [shown above], either mainly blue or mainly brown.

С

Blue and brown with bright orange marks on the hind-wings

Examples of the species in which this colouration is most likely to occur are shown opposite and below. Refer to Species Profiles.



Reverdin's Blue [female]

Idas Blue [female]



Chapman's Blue [spring brood female]



Variations of:

Adonis Blue [female]



Common Blue [female]



Group 1

BRIGHT, DARK or SILVERY BLUE with a relatively NARROW/THIN dark wing border



Maps 🔷

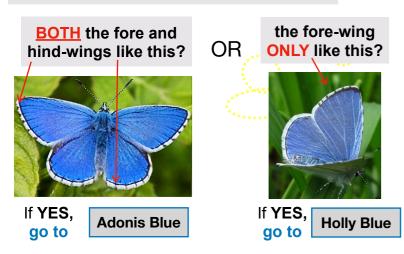




The uppersides of many of this group are variable and difficult to separate. **Most will therefore require an underside view** to **make a positive identification.**Nevertheless, comparing your butterfly with the features highlighted below may provide useful pointers as to its identity. Also, refer to the Species Profiles.

Note: For all of the species below it is the **male** that has a blue upperside. The exception is the Holly Blue with both sexes having blue uppersides

Are there <u>noticeable</u> dark fringe lines on:



Can you see a pale, fuzzy area on the fore-wing like this?





If YES, go to Chapman's Blue

This area contains scent scales for attracting females and is called an androconial patch.

In certain light

In certain light conditions and from some angles these scent scales create a shiny/ fuzzy patch in the basal area of the fore-wing.

Is your butterfly a bright blue with veins noticeably paler than the ground colour?

If YES, go to

Turquoise Blue



Usually appears a brighter blue than others in this group [except Adonis]. The pale veins extend well across both the fore and hind-wings.

Are there noticeable submarginal marks on the hind-wing?

If YES, then consider these three species.





Reverdin's Blue



Zephyr Blues



All three of these species usually have some **noticeable dark submarginal marks** on the hindwing which helps to differentiate them from the other species in this group. The marks, however, can vary in shape and size from prominent marks to completely absent or merging to create a thicker border. They can therefore only be confidently separated from each other [and others in this group] by their undersides. Go to the <u>UNDERSIDE KEY</u> or refer to their Species Profiles.

Noticeably LARGE?

Iolas Blue



Typically lolas is larger and Osiris smaller than the other species in this group. However, they can only be separated with confidence from others in this group by their undersides. Go to the UNDERSIDE KEY or refer to their

Species Profiles.

Osiris Blue

Noticeably SMALL?



Was your butterfly at high altitude, above 2000m?

Alpine Blue

In the Central Alps the Alpine Blue usually flies in rocky places at around 2000m and higher.



The following three species can only be confidently separated from each other [and others in this group] by their underside markings.

Go to the <u>UNDERSIDE KEY</u> or refer to their Species Profiles.

Common Blue



Cranberry Blue



Escher's Blue



Group 2

BRIGHT, DARK or SILVERY BLUE with:

[i] a relatively WIDE dark wing border [either on BOTH fore and hind-wing or ONLY on the fore-wing] and [ii] NO prominent submarginal marks or spots





Maps

The uppersides of many of this group are variable and difficult to separate. Many will therefore require an underside view to make a positive identification. Nevertheless, comparing your butterfly with the features highlighted below may provide useful pointers as to its identity. Follow the links and refer to the Species Profiles.

Notes: [i] For all of the species below it is the male that has a blue upperside. [ii] the wide border is usually a result of the dark border colour diffusing inwards.

Is the wing border fairly well defined like this?

If YES, then consider these four species.

Green-underside Blue



Black-eyed Blue



Black-eyed normally on the wing in April which is usually earlier than most species in this group.

Alcon Blue



Alcon usually visibly larger than others in this group.

Amanda's Blue



All of these species have similar uppersides. They usually have a fairly well defined dark wing border. This is often slightly wider on the fore-wing than the hind-wing and the fore-wing border generally widens towards the apex of the wing.

A view of the underside is necessary to separate these four species and make a positive identification.

Is the wing border very broad like this?



Damon Blue

The broad dark wing borders diffuse inwards making them appear somewhat ill defined.

If YES, then is there a small dark cell mark on the fore-wing like this?





YES >



There is frequently a dull brown

patch here on the fore-wing

Silvery Argus

Silvery blue colour with very broad dark wing borders. Usually a dark cell spot on the fore-wing. Could be confused with Glandon Blue.



Are the veins noticeably darker than the ground colour right across the wings?

Mazarine Blue

Veins usually stand out as dark lines across the whole wing. The dark wing borders are diffuse [normally obscuring a row of dark submarginal hind-wing spots] and not well defined. This overall appearance is normally distinctive.





Does the hind-wing border have indentations like this?

Meleager's Blue

Normally **two*** [as shown opposite] distinctive scallops or indentations in the hind-wing border here. When looking along the thin black border line these indentations contrast with the smoother borders of other species in this group.

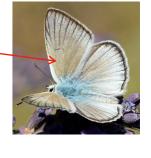


Is the ground colour very pale like this?

A pale greyish silvery blue colour, sometimes almost white, with a large brown androconial patch here.



Furry Blues



*Note: sometimes only one scallop

Group 3

BRIGHT, DARK or SILVERY BLUE with:

[i] a relatively WIDE dark wing border [either on BOTH fore and hind-wing or ONLY on the fore-wing] and [ii] SOME perceptible submarginal marks and/or spots



The uppersides of this group are variable. **Some could therefore require an underside view** to **make a positive identification.** Comparing your butterfly with the features highlighted below should provide useful pointers as to its identity. Follow the links and refer to the Species Profiles for more detailed information.

Notes: [i] the wide border is usually a result of the dark border colour diffusing inwards. [ii] beware confusion from shadows of marks showing through from the underside.

Are there noticeable dark fringe lines on both fore and hind-wings?

If YES, then consider these two species.

Chalkhill Blue [male]



Fringe lines on both wings, usually bolder on fore-wing. Dark submarginal marks on hind-wing normally have some degree of white surround.

Baton Blue [male]



Prominent dark fringe lines on both wings. Generally has visible cell marks on both fore and hind-wing. Very similar to Chequered Blue

Is there a noticeable row of large spots on the fore-wing?

Large Blue [male & female]



Male and female are similar. Both have:
[i] a row of large spots on fore-wing and sometimes some smaller hind-wing spots,
[ii] submarginal marks on both wings which the wing border often obscures [as shownhere]. Generally larger than and easily identified from others in this group.



Is the ground colour a dark steely blue?

Glandon Blue [male]



Generally a distinctive dark steely blue colour. Frequently there are visible cell marks on both wings sometimes with white surrounds. Usually some perceptible dark submarginal marks on hind-wing alongside white marks. Might be confused with Silvery Argus



Normally found above c.1600m in Central Alps and Pyrenees

Is the wing border much broader on the fore-wing?



First brood

Holly Blue [female]

The wide fore-wing border is very prominent whilst the hind-wing border can be almost absent. Fore-wing border is usually even wider in the second brood.

Normally some discernible dark submarginal marks on the hind-wing.

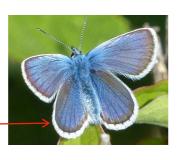


Second brood

Silver-studded Blue [male]



The inner edge of the wide black border is not clear and merges with the blue. Dark submarginal marks are present on the hindwing but these can often be obscured by the wing border.



Eros Blue [male]



A relatively wide wing border with dark submarginal marks on the hind-wing.

These marks can merge with the border and are not always clearly visible.

Could be confused with Common Blue.

Click here for a detailed comparison.



Group 4

Virtually ALL BROWN in colour with NO noticeable orange marks on hind-wing









Maps 🔿

Noticeably SMALL?

If YES, then consider these two species.







Both sexes are dark brown/black and frequently look more slate grey than brown. Males may have a slight blue dusting [as shown above]



The uppersides of this group are variable and can be difficult to separate. **Most will therefore require an underside view to make a positive identification.** Nevertheless, comparing your butterfly with the features highlighted below may provide useful pointers as to its identity. Also, refer to the Species Profiles.

> Blue dusting on the male Small Blue and female Osiris Blue might cause confusion with Group 5.

Small and Osiris [female] are included here in Group 4 because of their similarity in colour and size.

> Click here for a detailed comparison

Osiris Blue [female]







The female generally has a deep dark brown ground colour but sometimes has an appreciable amount of basal blue dusting [as shown above]

Veins noticeably darker than the ground colour?

If YES, then consider these similar butterflies by looking for:

An androconial patch on the basal half of the fore-wing



Submarginal dark marks on the the hind-wing

Ripart's Anomalous Blue [male]



Ripart's Anomalous Blue [female]



The females of these two species are virtually indistinguishable from one another. However, the presence of obvious dark submarginal marks on the hindwing would indicate the Furry Blue.



Furry Blues [female]



Note: The female Anomalous Blue is similar to the above butterflies but is placed in Group 6 because it frequently has orange hind-wing sub marginal marks.

Uniformly brown, sometimes with blue tinge in basal area and no submarginal marks?

These males are indistinguishable from

one another. They can generally be

separated from others in this group by the

androconial patch on their fore-wings.

Location may help to differentiate. Click here

If YES, then consider these four similar butterflies:

Silvery Argus [female]

Anomalous Blue [male]



Damon Blue [female]



Mazarine Blue [female]



Geranium Argus [male]



Occasionally very faint orange submarginal marks are visible on the hind-wing. This may confuse with the female Geranium Argus [see Group 6] Visible cell mark on both wings?

If YES, then consider

Glandon Blue [female]



Female frequently has:

[I] a noticeable dark cell mark on both wings. These are sometimes highlighted by a white surround,

[ii] a few pale submarginal marks on the hind-wing.

Group 5

MAINLY BROWN but usually with some noticeable blue or half brown/blue with NO noticeable orange marks on hind-wing





Maps



The uppersides of this group are variable and can be difficult to separate. **Most will therefore require an underside view to make a positive identification.** Nevertheless, comparing your butterfly with the features highlighted below may provide useful pointers as to its identity. Also, refer to the Species Profiles.

Note: For all of the species below it is the **female** that has a brown/blue upperside. The exception is the Chequered Blue with both sexes being brown/blue.

Are there <u>noticeable</u> dark fringe lines on <u>both</u> wings?

If YES, then consider these two species.

Baton Blue

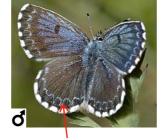


Female Baton Blue can be similar to both male and female Chequered Blue. A view of the underside may be required to separate.

Chequered Blue

Sexes are similar with widely varying amounts of blue. Females usually have less blue, sometimes almost none.





If visible, the pale surrounds to the submarginal marks on the hind-wing will help distinguish from Baton Blue

Is there a fore-wing cell mark outlined in white?

If YES, then consider this species.

Alpine Blue



Alpine Blue is variable. but usually darkish brown with some basal blue scaling and a dark fore-wing cell mark outlined in white. Extent of blue varies and the cell mark can be absent.



Normally found in Central Alps above 2000m.

Noticeably LARGE?

If YES, then consider these two species.

Alcon Blue





Alcon is dark grey/brown usually with noticeable blue basal scaling. Some large dark spots are present on the fore-wing but these are often faint or invisible.





Iolas Blue



These two species can only be confidently separated from

Iolas Blue generally appears half brown, half blue. Look for the presence of dark submarginal marks on the hind-wing, which can be faint.



Cranberry Blue

Usually very dark, almost black, with blue basal scaling which can extend further into the wings.



Hind-wing sometimes has a few small pale orange submarginal marks and a row of submarginal pale marks like thin white horizontal lines.

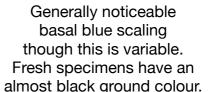
Black-eyed Blue



The blue basal scaling can vary greatly. It is often extensive but occasionally may



one another by their underside markings. Refer to their Species Profiles or go to the UNDERSIDE KEY



Green-underside Blue





Group 6

MAINLY BROWN but possibly some blue, and WITH noticeable orange marks on hind-wing

Terms



Maps

Note: For all of the species below it is the **female** that has a brown upperside. The exceptions are Brown/Northern Brown Argus with both sexes having brown uppersides.

Are there noticeable dark fringe lines on both fore and hind-wings?

If YES, then consider these two species.



They can often be distinguished from one another by the colour of the outer part of the hind-wing submarginal marks.





White



Click here for a detailed comparison

Chalkhill Blue

This group's uppersides are variable and difficult to separate. **Most will therefore require an underside view for a positive identification.**

Nevertheless, comparing your butterfly with the features highlighted below might provide useful pointers. Also, refer to the Species Profiles.



Silver-studded Blue

If YES, then consider these three species.



The orange marks on these three species are usually complete on the hind-wing and incomplete on fore-wing,



Do the orange marks on hind-wing look arch shaped like this?



Reverdin's Blue

Adonis Blue

Brown Argus [male & female]



The following features [as shown here] should help distinguish from others in this group: [i] no blue, [ii] **strong** submarginal orange marks on both wings, usually complete rows on female, [iii] a dark fore-wing cell mark, and [iv] sometimes fringe lines.

Northern Brown Argus [male & female]

Darker brown with fewer and smaller marks than the Brown Argus.



For a detailed comparison click here

Common Blue



These two species are very similar. They usually have a dark fore-wing cell mark and orange submarginal marks which are more complete on the hind-wing than on the fore-wing. Blue scaling is variable, sometimes nearly 100% on Common Blue.





For a detailed comparison click here

Escher's Blue



Turquoise Blue



Extent of the submarginal orange marks is variable. Generally more complete and stronger on the hind-wing than fore-wing.

Zephyr Blues



Orange marks very variable. Usually present on hind-wing. Sometimes absent from fore-wing [as shown above].

Chapman's Blue



The orange marks are frequently incomplete, especially on the fore-wing [as shown above].

Geranium Argus



The orange marks on the hind-wing are usually present but small. Very similar to the male [see Group 4] which has virtually no orange marks.

Amanda's Blue



On average, larger than the other species in this group. Orange marks are incomplete/vestigial on fore-wing.

Anomalous Blue



The orange marks can be very faint. The veins are normally distinctly darker than the ground colour.



Species Profiles



Southern Common Blue [Polyommatus celina]

The Common Blue is the most likely species to be encountered, being found in most habitats throughout Europe. It is virtually indistinguishable from the Southern Common Blue which DNA analysis has revealed is a separate species. The exact distribution of celina is uncertain but it is found in southern Spain, the Balearics, Sardinia and parts of Sicily. Learning to recognise the Common/ Southern Common Blue is worthwhile as several other Blues can be identified by comparison with the typical form shown below.

The Common/Southern Common Blue displays great variation from the typical form described below. Examples of this variation are shown on the next page.

Upperside MALE

Hind-wing

submarginal marks:

absent, but sometimes

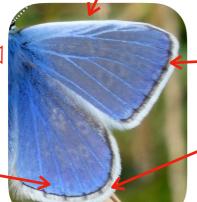
faint shadows of the

underside marks can

be seen through the

wing as shown here

Colour: medium blue, sometimes with a violet tinge



Costa: normally brightly highlighted [as shown here]

Fringe: mainly white, usually greyish near dark wing border. Sometimes partial fringe lines extending a short way [as shown here]

Veins:

depending on lighting, veins can often appear paler than ground colour especially near leading edge of forewing but sometimes veins may be a slightly darker blue

Wing border: dark and narrow

Key Identification Feature

Underside fore-wing cell spot:

Confirmation of the presence of this spot simplifies identification as Eros Blue is the only other species in this guide with this spot which could cause confusion. Go to Eros Blue for a detailed comparison.

Other species in this guide with this spot are: Adonis, Baton, Chalkhill, Chequered, Glandon and Large. All are quite different and easily distinguished.

Notes: [i] If this spot cannot be confirmed see Group F to compare the undersides of similar species with no fore-wing cell spot, [ii] this spot is absent on the occasionally found form icarinus

Colour: varying shades of brown, with variable amounts of blue scaling. See examples on next page.



Fore-wing cell mark: small, faint, dark mark

Upperside FEMALE

Fringe: off-white

Hind-wing submarginal marks: a row of orange and black marks with small white outer marks. These marks are frequently incomplete.

Fore-wing submarginal marks: a row of

orange and black marks. Usually faint, incomplete [as shown here]



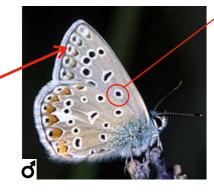






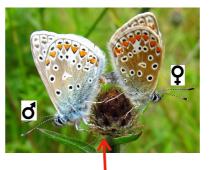
Underside MALE

Fore-wing submarginal marks: the row of submarginal orange marks usually becomes faint or disappears towards the apex.



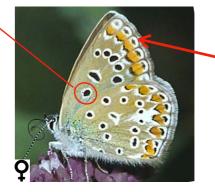
Underside fore-wing cell spot:

Clearly visible in photos left and right but sometimes hidden as in the mating pair below.



Colour: The female has a noticeably browner and darker underside ground colour than the male which is greyish.

Underside FEMALE



Fore-wing submarginal marks: a complete row of orange submarginal marks on fore-wing, reaching to the apex.









Examples of Variation

The Common/Southern Common Blue is extremely variable in colour, markings and size and therefore should always be considered a possibility when identifying Blues. Below are examples of the main variations from the typical form described on the previous page. The features below can occur singly or in combination.

Upperside MALE

some submarginal marks on hind-wing [especially in Spain]



broader wing border



fringe



partial fringe lines

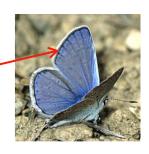


vein darkening

some

fringe

lines



Upperside FEMALE

Extent of blue scaling



bright overall blue, more frequent in north and cooler areas



ground colour

can be

these white marks can also become blue

size and number of submarginal orange marks



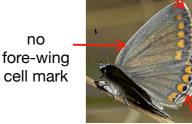
small. incomplete

Spots can be:



large complete rows

fringe darker



strongly developed submarginal marks showing, orange, black and white



Extreme form sardoa, is linked to Corsica and Sardinia although similar forms are found elsewhere

Underside MALE and FEMALE



Ground colour can be paler or darker than the typical form

colour of orange marks ranges from: brick red to pale vellow



smaller

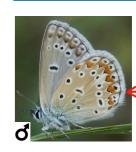
larger, bolder

fringe can be dark

It is not uncommon to find aberrations with fused spots

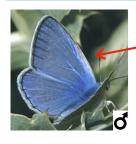


Form icarinus



Aberrations with missing spots are sometimes seen including the form icarinus where the characteristic cell spot is absent.

Form boalensis



Form boalensis flies in northern Spain in acidic habitats. Males are a darker blue with slightly wider wing borders and significant vein darkening. Females usually have dark wing fringes. Marks on both sexes are bold as seen on upper and underside of this female.



Form andronicus

Andronicus is found around Mt Phalakron and nearby mountains in Greece and Bulgaria. It is noticeably larger and a darker shade of blue.



Form mariscolore

Mariscolore occurs in northwestern Scotland and Ireland. Females have almost totally blue uppersides with the males said to be larger with bright blue uppersides.

The Eros Blue, especially females, can be very difficult to distinguish from the Common/Southern Common **Blue** as considerable variation occurs in both species. The points below should help the identification process.



Maps

Terms



Upperside MALE



Colour: silvery reflective blue. Normally brighter than Common Blue.

Fringe: white



Hind-wing submarginal marks:

dark marks, not always clearly visible, as they often merge with the border. Presence of these marks distinguishes from Common Blue.

Wing border: dark broad border usually distinguishes from Common Blue



Key Identification Features

Underside fore-wing cell spot:

if this spot can be confirmed as present it simplifies identification, as the Common/Southern Common Blue is the only other species in this guide with this spot which could confuse.

Eros v Common/Southern Common

[i] Male Eros upperside is typically a brighter blue with a broader black border and some submarginal dark marks.

[ii] Eros is generally encountered at much higher altitudes than is usual for Common/Southern Common.

[iii] Females are best separated by probability - with reference to the number of identifiable males present.

[iv] Distribution - Eros has a more restricted range than the widespread Common/Southern Common [See Maps]

Note: Other species in this guide with a fore-wing cell spot are: Adonis, Baton, Chalkhill, Chequered, Glandon and Large Blue. All are quite different and easily distinguished from Eros.

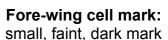
Upperside FEMALE

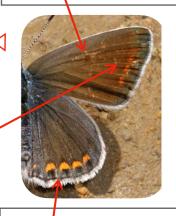
Colour: varying shades of brown with variable amounts of blue scaling





Fore-wing submarginal marks: a row of orange and black marks. Usually faint, incomplete [as shown here]

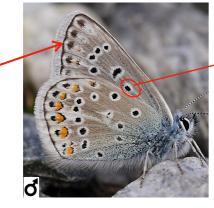




Hind-wing submarginal marks: a row of orange and black marks, often incomplete



Fore-wing submarginal marks: the row of submarginal orange marks on forewing usually becomes faint or disappears towards the apex



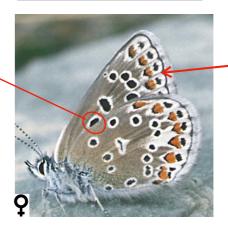
Underside fore-wing cell spot:

 ∇

Clearly visible in these photographs but sometimes hidden by the hind-wing

Notes: [i] As with the Common/Southern Common Blue this spot is occasionally found to be absent or very small. [ii] If this spot cannot be confirmed see Group F of the Underside Key to compare the undersides of similar species with no fore-wing cell spot.

Underside FEMALE



Fore-wing submarginal marks: usually a near

complete row of orange submarginal marks on fore-wing reaching to the apex

Subspecies eroides [False Eros Blue]



Eroides is localised, flying in northern Greece, the Balkans and rarely northwards to Slovakia and Poland. Overlap with eros is only possible in some parts of the Balkans. Eroides is very similar to eros with subtle qualitative differences, e.g. eroides is usually larger, males are less silvery blue, underside marks are bolder, and underside orange marks are more consistently orange not tending to yellow.



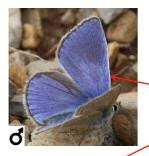
Subspecies menelaos

Menelaos is found only in the Taygetos mountains of the southern Peloponnese where eros is not present. Menelaos is very similar to eros although usually slightly larger.

Upperside MALE



Fringe: white, no fringe lines Wing border: dark and narrow





Androconial patch: androconia are scent scales for attracting females. In certain light conditions and from some angles they create a shiny/fuzzy patch in the basal area of the fore-wing. If an androconial patch is present this reliably distinguishes from Common/Southern Common, Eros and Escher's.

Upperside FEMALE



Submarginal marks:

row of orange and black marks on both wings. These marks are frequently incomplete, especially on the fore-wing [as shown here]



Colour: varying shades of brown with variable amounts of blue.

More extensive blue scaling is most commonly found in the

Spring Brood. Summer Brood is usually brown.

Underside MALE and FEMALE

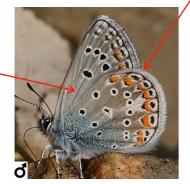
Female usually a browner ground colour, otherwise sexes are similar.



Presence of a significant orange mark here in s1, especially in males, can help separate from Escher's



here here distinguishes from Common/Southern
Common and Eros



All submarginal hind-wing black marks usually have white surrounds dividing them from the orange mark whereas Common/
Southern Common usually has some black marks close to or merging with the orange mark

Chapman's v Escher's

Almost inseparable, but an androconial patch on Chapman's is diagnostic.

Also, compare these features highlighted in blue boxes:

UPPERSIDE

MALE - fringe lines, veins, costa FEMALE - blue scaling

UNDERSIDE

MALE and FEMALE - orange mark in hind-wing s1, inner submarginal marks

Key Identification Features

Both Chapman's and Escher's are similar to the Common/Southern Common and Eros Blue from which they can be distinguished by confirming the absence of an underside fore-wing cell spot*.

Other differences to look for are:

[i] Chapman's and Escher's male uppersides usually have a slightly broader dark wing border than Common/Southern Common,

[ii] confirmation of androconial patch on Chapman's is diagnostic

[iii] underside hind-wing submarginal black marks on Chapman's are well defined compared to Common/Southern Common.

*If the presence/absence of this spot cannot be confirmed see Group F of the Underside Key to consider other possible species.

Note: Infrequently the cell spot can be absent on the Common/Southern Common Blue and Eros

Upperside MALE



Wing border: dark and narrow

Costa: normally pale and bright

Veins:
usually
noticeable
branching
pale veins

here

Fringe lines:

sometimes partial fringe lines, as shown here

Upperside FEMALE



Colour:

brown, rarely any blue scaling

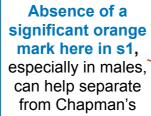
Submarginal marks:

both wings have a variable number of orange marks, often stronger marks on hind-wing

Underside MALE and FEMALE

Female usually browner, otherwise sexes similar.

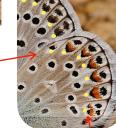
No cell spot here distinguishes from Common/Southern Common and Eros











Both sexes tend to have bolder underside markings than Chapman's, especially the row of inner submarginal black marks indicated here by the touching yellow dots

Upperside MALE



Veins: [i] some vein darkening in submarginal band, [ii] principal vein in basal area here usually appears very bright

Amanda's uppersides

are similar to several

other species. See

Group 2 for MALES and

Group 6 for FEMALES.

An underside view

is necessary for a

positive identification

usually has a broad, dark border diffusing inwards. This is variable.

Submarginal marks: sometimes faded marks on hind-wing



Upperside FEMALE

Colour: generally brown, usually with no blue scaling

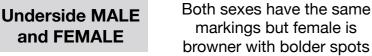




Submarginal marks:

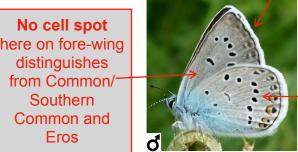
Fringe: dull white

rows of orange and black marks usually more complete on hind-wing than fore-wing where they are often absent. Only a few marks is typical of Central Europe [as shown here].





NO significant submarginal orange marks on MALE fore-wing could help distinguish from Chapman's and Escher's Blue



No white flash here on hind-wing is an important identifying feature.

Wing border: fore-wing



Amanda's is, on average, noticeably larger than Chapman's, Escher's and Common/Southern Common Blue.

Key Identification Features

Amanda's Blue might be confused with a number of species. The UNDERSIDE features below are the most reliable way to distinguish.

[I] NO fore-wing cell spot: If enough of the underside fore-wing is visible to confirm the absence of this spot then this will usually distinguish from **Common/Southern Common** and Eros Blue

Note: Occasionally the cell spot can be absent on the Common/Southern Common and Eros Blue.

[ii] NO white flash on underside hind-wing:

Absence of a white flash will usually distinguish from Chapman's and Escher's Blue. Click here for a comparison.

Form isias

Form isias is found amongst females in Fennoscandia which frequently have blue scaling on their uppersides.



Upperside MALE



Upperside FEMALE



Colour: dark blue

Wing border: dark and narrow



Uppersides of both sexes are similar to several other species [See Group 1 & Group 5]. Underside view necessary for identification

Colour: usually very dark, almost black, with blue basal scaling which can extend further into the wings

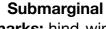


Key Identification Features

Underside hind-wing submarginal mark s6: Prominent mark with blue scaling allows instant identification. This striking mark is diagnostic and creates a unique underside pattern quite different from any other species in this guide.

Habitat:

Usually found on heaths and moors in the vicinity of its foodplants, Cranberry [plus other species of Vaccinium], and Cross-leaved Heath [Erica tetralix]



marks: hind-wing sometimes has a few small pale orange marks and a row of submarginal pale marks like thin white horizontal lines



Underside MALE & FEMALE

Male and female are very similar



mark s6: prominent orange mark, usually with blue scaling



In addition to the prominent mark in s6 there are usually one or two other adjacent smaller orange marks with or without blue scaling [as shown here].

Note: the blue scaling in the marks can sometimes not be visible due to the angle of viewing.



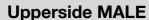
Silver-studded Blue can be difficult to distinguish from Idas and Reverdin's

as it shows great variation across its wide range with numerous regional forms having been described. The points below should help the identification process.



Terms =







Hind-wing

submarginal marks:

normally black marks

somewhat obscured

by dark border

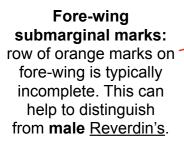
Wing border: typically broad and dark spreading inwards. This may help to differentiate from Idas and Reverdin's thinner borders.

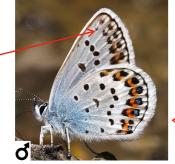


Fringe: usually white, contrasting with a duskier blue ground colour and with some small short fringe lines [as shown here]

Veins: generally some partial vein darkening [as shown here]

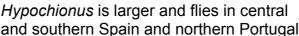
Underside MALE





Hind-wing inner submarginal marks: band of white inner submarginal marks here [traced by the red dots] may sometimes be noticeably bright. If this band is visible it should help in distinguishing from Reverdin's.

Blue/silver scales: these are usually present in **ONE or more** of the underside hind-wing submarginal marks





Males have bright blue uppersides and a pale, almost white underside ground colour. Females have almost complete submarginal marks.



Key Identification Feature

Blue/silver scales in underside hind-wing submarginal marks:

These 'blue/silver studs' are usually present in ONE or more of the hind-wing submarginal marks. Sometimes they are: [i] NOT VISIBLE depending on the angle of viewing/lighting or [ii] completely absent.

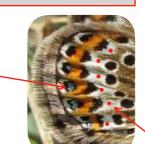
The other species in this guide with 'blue/silver studs' which can confuse are **Idas** and **Reverdin's**. Click below for a detailed comparison of:

[i] Silver-studded v Idas [ii] Silver-studded v Reverdin's [iii] Silver-studded v Idas v Reverdin's undersides

Cranberry also has 'silver studs' but is easily identified.

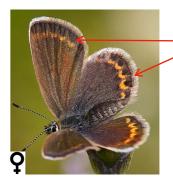
Note: Other frequently cited ways of distinguishing Silver-studded from Idas and Reverdin's are: [i] the presence of a tiny foreleg spine on Silver-studded, [ii] the shape of the underside submarginal dark marks.

The reliability of these two features is, however, considered uncertain as: [i] observing the small spine accurately is not practical, and [ii] the underside submarginal marks are extremely variable.



Upperside FEMALE

Colour: various shades of brown. Usually little or no blue scaling but can be extensive.



Submarginal marks: arch shaped orange marks containing a black spot, typically a complete row on hind-wing and faint/

incomplete on fore-wing

[as shown here]

Fringe: usually brown/grey which might distinguish from Reverdin's white fringe

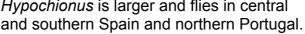
Underside FEMALE



Female differs from male by usually having [i] a complete row of orange marks on the fore-wing, and [ii] a darker ground colour

Hind-wing inner submarginal marks: band of white marks [traced by red dots] is usually very conspicuous. This will help to distinguish from Reverdin's.

Form hypochionus





rows of upperside orange



Aegidion is found at high altitude in the Central Alps. The males have broader dark wing borders.



Subspecies corsicus

This subspecies is local in Corsica. The male underside is vellowish with vaguer markings and females usually have some blue scaling on the upperside.

Reverdin's Blue can be difficult to separate from Idas and Silver-studded.

The comparisons and features highlighted below should help the identification process.

Colour: various shades of

brown. Blue scaling can vary

from none to extensive

[see examples below]





Upperside MALE



Wing border: narrow dark border helps differentiate from Silverstudded Blue



Veins: thin dark veins, sometimes dark along their whole length which may help distinguish from Idas



submarginal marks: usually noticeable dark marks touching the wing border but these can be variable

Hind-wing

Upperside FEMALE



Fringe: usually white unlike female Silverstudded Blue which typically has a brown/grey fringe

Submarginal marks: orange and black arch shaped marks varying in size and number, sometimes absent from fore-wing





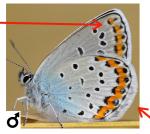


Distribution

Reverdin's is generally a lowland species, rarely found above 1000m

Underside MALE



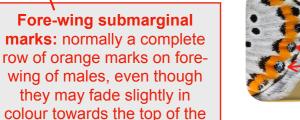


wing. This will usually

differentiate from male Idas

and male Silver-studded Blue.

Colour: male underside is normally uniformly pale with a little blue at the base. Female is also pale but slightly darker and brownish. The pale appearance of this uniform ground colour can be conspicuous in the field and can help to distinguish from Idas and Silver-studded Blue.

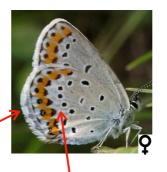




Blue/silver scales: are usually present in **ONE** or more of the hind-wing submarginal marks



Underside FEMALE



NO noticeable band of white inner submarginal marks here. This can help to separate from female Silverstudded Blue.

Key Identification Features

Blue/silver scales in underside hind-wing submarginal marks:

These 'blue/silver studs' are usually present in ONE or more of the hind-wing submarginal marks. Sometimes they are NOT VISIBLE depending on the angle of viewing/lighting.

The other species in this guide with this feature which can confuse are <u>Idas</u> and <u>Silver-studded</u>. A detailed comparison with both is given below.

Cranberry also has 'silver studs' but is easily identified.

Reverdin's v Silver-studded

Reverdin's:

- MALE upperside wing border is narrower
- MALE underside fore-wing has a complete row of orange submarginal marks
- FEMALE has a white fringe
- FEMALE underside hind-wing has no noticeable band of white inner submarginal marks
- MALE and FEMALE undersides look paler
- MALE and FEMALE usually larger than Silver-studded.

Note: Due to variation the above features are best used in conjunction to assess the probability of identity. Taken singly they are not reliable.

Reverdin's v Idas

Reverdin's:

- MALE upperside sometimes has thin veins which are dark along their whole length
- MALE underside fore-wing has a complete row of orange submarginal marks
- MALE and FEMALE undersides have a more uniform pale ground colour than Idas.

Note: The shape of the underside submarginal dark marks is often cited as a distinguishing feature. This is considered unreliable as the marks are extremely variable.

<mark>ldas Blue [Plebejus idas]</mark>

Idas can be difficult to separate from Reverdin's and Silver-studded Blue. The points below should help identify. Idas displays considerable variation with many regional forms across its wide range. In the Central Alps Idas has a fairly consistent appearance and so this race might be considered as the 'standard' form. This race is illustrated below.







Upperside MALE



Wing border: Usually a narrow dark border which can help to differentiate from Silver-studded Blue

Hind-wing submarginal marks: varying from completely absent to:

noticeable triangular shaped marks

merging and creating thicker border





Upperside FEMALE



Submarginal marks: arch shaped orange marks containing a dark spot, typically a complete row on hind-wing and incomplete/ faint on fore-wing



Colour: various shades of brown with blue scaling varying from none to extensive



Underside MALE and FEMALE

Male and female are similar but female is usually somewhat browner



Colour: ground colour pale brownish. This can distinguish from shiny pale grey of Silver-studded Blue.

Both sexes have less basal blue scaling



Bigger dark vein end marks on hind-wing border than Silver-studded Blue

Blue/silver scales: are usually present in **ONE or** more of the hind-wing submarginal marks

on hind-wing than Silver-studded Blue

Subspecies nevadensis





Nevadensis flies in Sierra Nevada, southern Spain. It has stronger underside markings and numerous submarginal marks with blue/silver scales. Male uppersides are a deeper blue with wider dark wing borders.

Subspecies bellieri



Bellieri has very bold underside markings and is found on Corsica and Sardinia. Male uppersides are a duskier blue with very broad dark wing borders.

Form calliopis

Calliopis occurs in the Rhone valley of Switzerland and the Alps of southeastern France, generally below 1000m and with a particular habitat requirement; hot, dry locations close to its foodplant Sea Buckthorn [Hippophae rhamnoides]. It is larger and typically has smaller underside spots.

Key Identification Feature

Blue/silver scales in underside hind-wing submarginal marks:

These 'blue/silver studs' are usually present in ONE or more of the hind-wing submarginal marks. Sometimes they are NOT VISIBLE depending on the angle of viewing/lighting.

The other species in this guide with this feature which can confuse are Reverdin's and Silver-studded. For a detailed comparison with Reverdin's click here or see below for Silver-studded.

Cranberry also has 'silver studs' but is easily identified.

Idas v Silver-studded

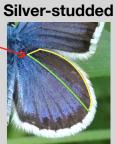
Idas MALE upperside:

- typically has a narrower wing border
- is generally a brighter blue
- · usually without prominent dark veins
- has more blue in hind-wing area shown below:

Idas



Idas usually has noticeable blue scaling in the area bounded yellow and green especially in the lower section towards the green line. Silver-studded is generally darker overall in this area with no blue scaling in upper section and some blue patches near the green line.



Idas MALE & FEMALE underside:

 ground colour is pale brown compared to shiny pale grey of Silver-studded

Idas MALE & FEMALE underside hind-wing:

- has noticeably less basal blue scaling
- has bigger dark vein end marks on border.

N.B. Due to variation, all the above features are best used in conjunction to assess the probability of identity. Taken singly they are not reliable.



Veins:

normally

some vein

darkening

here

Terms ⇒



Maps 🔷



Generally has two broods. April-June, and July-August

Upperside MALE

Colour: almost as bright a blue as the Adonis Blue.

Veins: veins

in basal area

here usually

appear bright



Wing border: dark and narrow



Colour: brown. sometimes a little blue scaling in basal area



Submarginal marks: rows of orange marks on both wings. Usually more complete on hind-wing than fore-wing where they are often absent or incomplete.

Hind-wing

submarginal marks:

often some very small

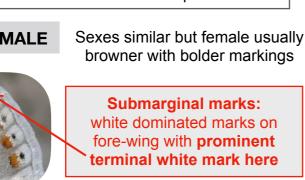
marks in the upper

edge of hind-wing

Underside MALE & FEMALE







Hind-wing

orange

submarginal

marks can

appear heart

shaped (

Habitat

Turquoise Blue tends to be found on calcareous soils where the principal food plant Kidney Vetch [Anthyllis vulneraria] usually grows.

Similar 'Local' Species

that might confuse is **Nevada Blue** [Polyommatus golgus] which flies at high altitudes in southeastern Spain outside the range of Turquoise Blue. This species will be described in detail in part 2 of this guide. See Introduction. Please refer to other sources for more information.



Turquoise Blue uppersides may be confused with several other species. See Group 1 for MALES and Group 6 for FEMALES. An underside view is necessary for a

positive identification

Key Identification Features

Turquoise Blue's distinctive UNDERSIDE features should readily identify.

[i] Underside fore-wing submarginal marks:

The predominance of white in these marks including a prominent white terminal mark at the apex gives the Turquoise Blue a distinctive appearance.

[ii] Heart shaped orange marks on underside hind-wing:

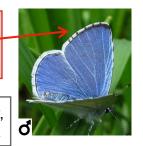
The inner dark submarginal marks on the hind-wing are usually very small or absent. This creates the impression of heart shaped orange marks, especially on males.

Holly Blue [Celastrina argiolus]

Upperside MALE - both broods

Fringe lines: usually complete dark lines on fore-wing only

Wing border: dark, narrow, widening towards the apex



Could be confused with male Adonis Blue. However, Adonis generally has fringe lines on **both** fore and hind-wing.

Behaviour: Holly Blue is usually found flying around bushes/shrubs above ground level.

Key Identification Features

Fringe lines or 'chequering': noticeable dark fringe lines on upperside and underside fore-wing of both sexes.

Wide dark wing borders on FEMALE upperside fore-wing Prominent wing borders on both broods of females.

> Unique underside pattern of markings:

Although variable, the elongated fore-wing spots and hind-wing spots without white surrounds are unlikely to be confused with any other species in this guide.

outer spots: without

noticeable pale surrounds

Upperside FEMALE



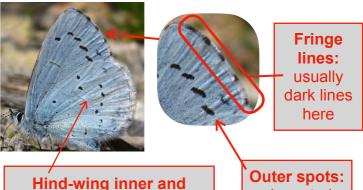
Wing border: the wide forewing border is very prominent whilst the hindwing border can be almost absent.



Submarginal marks: row of dark marks on the hind-wing

Underside MALE and FEMALE

Colour: bluish grey



elongated not round

Holly Blue underside could be confused with Osiris Blue, Small Blue, and Provençal Short-tailed Blue. However, [i] a close examination of the spots, and [ii] the presence of forewing fringe lines should readily identify the Holly Blue.



Maps 😑







The three Zephyr Blues below are found in separate regions of Europe and are part of a wider group. The Alpine Zephyr Blue is probably the best known and the Key Underside Identifying Features described on its typical form below are common to all three species. The other features shown are present to a greater or lesser extent on all three species.

Alpine Zephyr Blue [Kretania trappi]

Found locally in the **Central Alps**

Upperside MALE



Veins: sometimes has noticeable dark veins on both wings

Hind-wing submarginal marks: usually a number of dark marks which can vary in shape and size



Wing border: dark and relatively narrow. This is variable and can diffuse inwards.

Upperside FEMALE



Submarginal marks:

Behaviour

Often found on

Milk-Vetch

[Astragalus species]

the common

foodplant of all

three Zephyrs.

Zephyr Blue uppersides may be confused with several other species. An underside view is necessary for a

Colour: brown. sometimes a little blue scaling in basal area

number and size of orange marks is variable. Usually present on the hindwing, sometimes on the fore-wing.

See Group 1 for MALES Group 6 for FEMALES. positive identification

Key Identification Features

Zephyr Blues might be confused with a number of species. The UNDERSIDE features below are the most reliable way to distinguish.

[i] NO fore-wing cell spot: If enough of the underside fore-wing is visible to confirm the absence of this spot then this will usually distinguish from Common/Southern Common and Eros Blue

[Note: Occasionally the cell spot can be absent on the Common/Southern Common and Eros Blue]

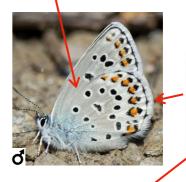
- [ii] Underside hind-wing submarginal marks:
- [a] Usually NO submarginal orange mark in s7a
- [b] orange marks taper towards the outer black marks.

Underside MALE & FEMALE

Sexes similar but female is usually browner

No cell spot here distinguishes from Common/ Southern Common and Eros





Usually no orange mark here [at best vestigial] in s7a. This is probably definitive.

Some or all of the orange marks taper and become narrower where they touch the outer black marks

Spanish Zephyr Blue [Kretania hesperica]

Found locally in the Tagus Valley and southern Sistema Ibérico [central Spain] and in a few mountain locations of southeastern Spain. The male is generally a brighter, lighter blue than trappi.







Distribution Up to 1950 1951 - 1980 After 1980 **Alpine** Balkan Spanish

Balkan Zephyr Blue [Kretania sephirus]

Locally in southeast Europe through the Balkans to Greece.









Form brethertoni

Form brethertoni is most often found in southern Greece. Males have small orange/reddish patches next to the hind-wing black submarginal spots.

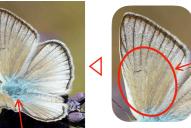
Furry Blue [Polyommatus dolus]

A variable group with **two very similar species**, **dolus and fulgens** [separated by analysis of chromosomes/DNA] and several subspecies summarised below.

Flies in south east **France** and north west **Italy**.

Upperside MALE

Colour: pale greyish silvery blue





Androconial patch: large brown coloured patch, normally visible on fore-wing



Upperside FEMALE



Veins: usually darker than the ground colour

Colour:

uniformly brown



Submarginal marks: row of dark marks normally visible on hind-wing



Underside MALE & FEMALE

Some blue scaling in the basal area

Sexes are similar. Female generally browner than the male with bolder fore-wing spots



usually NO white stripe on hind-wing or very faint



Fringe:

white

FEMALE Furry Blue uppersides can often be distinguished from similar females [see Group 4] by: [i] the presence of dark submarginal marks on the hind-wing, [ii] taking account of what males are flying.



Furry Blues with an underside white stripe could be confused with Damon Blue and Ripart's Anomalous Blue. Click here for a comparison.

Subspecies vittatus

Found west of the Rhone in south east Massif Central and its foothills. Similar upperside to dolus but nearly always has a visible white stripe.



Subspecies virgilius

Central and southern Italy. Similar to dolus but males much paler on upperside and under. Usually without underside white stripe.



Catalonian Furry Blue [Polyommatus fulgens]

Replacing the Furry Blue in northern **Spain** the Catalonian Furry Blue flies from Catalonia to the western Cantabrians, including the Pyrenees. The uppersides of both sexes are similar to the Furry Blue.

Subspecies pseudovirgilius

Flies from the Basque Country to the Cantabrians. Uppersides of both sexes similar to Furry Blue although male upperside is noticeably paler.



All these Spanish races have similar undersides, normally with a white stripe except: in Catalonia, where the white stripe is usually absent or faint.

Subspecies ainsae

Found in the Pyrenees. Uppersides of both sexes similar to Furry Blue.

Similar 'Local' Species

which may confuse are: Mother-of-pearl Blue [Polyommatus nivescens] found in calcareous areas of eastern Spain and Chelmos Blue [Polyommatus iphigenia] found in southern Greece. These species will be described in detail in the second part of this guide. See <u>Introduction</u>. Please refer to other sources for information if necessary.

Key Identification Features

Androconial patch:

Patch of female attracting scent scales usually visible in basal area of MALE upperside fore-wing. This feature is common to all the species and subspecies.

Underside hind-wing white stripe [when present]:

The noticeable broad white stripe is extremely variable. For example, where it normally is: [I] present, the stripe can be absent or very faint, [ii] absent, the stripe can sometimes be visible or faint. The expected occurrence of the stripe is given in the notes for the species and subspecies.

Terms 🗦

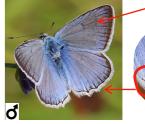


Maps





Frequently a dull brown patch here





Click here for comparison with similar males

Upperside **FEMALE**

Blue form

Brown form

steeveni





Distinctive appearance with black veins and deep scallops

Key Identification Features

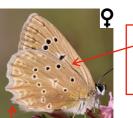
Hind-wing scallops or indentations:

Usually a number of noticeable scallops on the bottom edge of the hind-wing of both sexes.

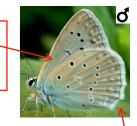
Overall distinctive appearance:

The FEMALE could not be mistaken for any other species whilst the **MALE** has enough distinctive features to ensure identification.

Underside MALE & FEMALE



NO cell spot



The **distinctive** scallops or indentations are more pronounced on females than males. Click here for comparison within Group E.



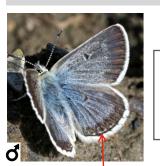
Terms



Maps

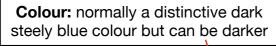
Alpine Blue [Agriades orbitulus]

Upperside MALE



Wina border: dark and wide

Hind-wing submarginal marks: usually some perceptible dark marks alongside small white marks



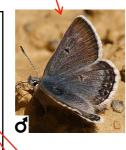
Cell marks: frequently there are visible cell marks on

both wings

sometimes

with white

surrounds





Key Identification Features

Underside hind-wing spots and marks:

[i] Many of the outer and inner spots. plus the cell mark, usually appear as large white marks around faint or absent black spots.

[ii] A prominent orange submarginal mark in s6.

Key Identification Features

Underside hind-wing spots and marks:

[i] The outer and inner spots plus the cell mark appear as large white marks.

[ii] submarginal marks very faint and pale.

The above features create a distinctive appearance.

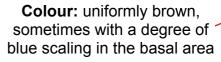
Upperside MALE

Wing border: dark, narrow

The Alpine Blue male upperside is similar to males of other species [See Group 1] However, Eros Blue is the most likely to be found flying in the Central Alps, above 2000m, in the same habitat as Alpine Blue. Usefully, a mere glimpse of the Alpine Blue's distinctive underside [see below] will easily identify.



Upperside FEMALE







FEMALE uppersides of Glandon and Alpine can look very similar. If in doubt, an underside view will separate.



Fore-wing cell mark: dark mark outlined in white is usual but this can be absent

Upperside FEMALE

Colour: uniformly brown



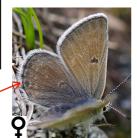
Glandon is normally found above the tree

line in rocky places at c.1700m. This is

usually a different habitat to the Silvery Argus which has a similar male upperside.

> **Cell marks:** noticeable marks often present on both wings sometimes outlined in white

Hind-wing submarginal marks: usually some marks similar to the male but fainter



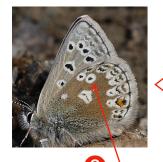
Underside MALE & FEMALE



hind-wing outer and inner spots, cell mark: all are usually underdeveloped becoming large white marks.

Hind-wing submarginal marks: row of pale, faint marks

Underside MALE & FEMALE



The colon mark here can be similar to Brown/ Northern Brown Argus. However, the obvious differences in orange markings should easily distinguish.



Outer spot o1: normally always fully developed with a significant black centre

hind-wing spots, cell mark:

many spots usually underdeveloped, becoming white marks around faint/ absent black spots. Outer spots often merge with the submarginal marks.

Hind-wing submarginal marks: prominent orange mark in s6

hind-wing cell mark: large white mark with usually only a faint black speck within it



which might confuse

with the Glandon Blue are:

- Gavarnie Blue [Agriades pyrenaicus] -Picos de Europa and Pyrenees
- Arctic Blue [Agriades aguilo] northern Scandinavia
- Zullich's Blue [Agriades zullichi] Sierra Nevada, southern Spain above c.2500m

These species will be described in detail in the second part of this guide. See Introduction. Please refer to other sources for information if necessary.



..........

Gavarnie Blue's underside may be confused with Alpine and Glandon undersides. However, Gavarnie is: [i] found flying with Glandon only in the Pyrenees, [ii] not found flying with Alpine.

Gavarnie MALES can be differentiated by their pale grey upperside ground colour and well defined wing borders.





Mazarine Blue [Cyaniris semiargus]

Upperside MALE

Wing border: very broad dark wing border







Dark veins: created by the wing border diffusing inwards along the veins

Could be confused with male Silvery Argus. Differentiate by: [i] Damon's dark veins and tapering hind-wing border, [ii] the fore-wing cell mark usually found on Silvery Argus.

Upperside FEMALE



Colour: uniformly brown, sometimes noticeable blue tinge on thorax hairs and in the basal area

Fringe: bright white



Underside MALE & FEMALE

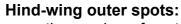
Hind-wing stripe: noticeable broad white stripe

Sexes similar, female often smaller and browner



Outer spots:

on both sexes the outer spots are much bolder on the fore-wing than the hind-wing where they can be very small



on both sexes the number of spots is often reduced; o2 is frequently absent/vestigial and o6 is where the row usually ends



Underside hind-wing white stripe:

The prominent broad white stripe on Damon's underside hind-wing is noticed immediately. The other species in this guide with a similar underside and white stripe are **Ripart's Anomalous Blue** and Furry Blue.

> Click here for a comparison to help differentiate.

Note: Geranium Argus and Silvery Argus also have a white stripe on the underside hindwing but their other markings will easily distinguish.

MALE upperside dark veins across whole wing:

The noticeable network of dark veins crossing the whole length of both wings usually creates a distinctive appearance.

Underside outer spots:

on both fore and hind-wings helps to distinguish from: Small Blue, Osiris Blue, and Anomalous Blue.

Click here for a comparison and explanation of how to

FEMALE Damon and Mazarine uppersides are very similar to one another and also:

[i] MALE Geranium Argus, [ii] FEMALE Silvery Argus, [iii] FEMALE Ripart's Anomalous Blue which may be distinguishable by its darker fringes and darker veins

> [iv] FEMALE Small Blue and Osiris Blue However, Mazarine and Damon are, on average, larger than these two species.

An underside view is necessary in most cases to ensure a positive identification.





Key Identification Features

The position of these spots

separate these species.

Upperside MALE



marks: A row of dark marks are present but usually obscured by the dark wing border

Hind-wing

submarginal



Fore-wing

cell mark:

often a small

dark mark is

visible

Wing border: broad dark border normally diffusing inwards

Veins: normally stand out as dark lines across the whole of each wing

Upperside FEMALE

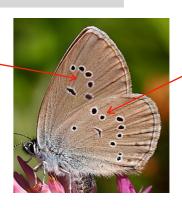


Fringe: bright white

Colour: uniformly brown, often a blue tinge in basal area

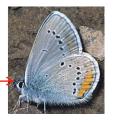
Underside MALE & FEMALE

Fore-wing outer spots: the row is distinctly curved [see details in **Key Feature** above]



Hind-wing outer spot o2: is just below a straight line between spots o1 and o3 [see details in Key Feature abovel

Helena is found locally in Greece from the Taygetos mountains northwards to Mt. Chelmos. Mazarine Blue does not fly with helena which differs in having orange submarginal marks on the female upperside and also some orange marks on the underside of both sexes.



Similar 'Local' **Species**

which might confuse is Pontic Blue [Neolysandra coelestina] found in southern Greece This species will be described in more detail in the second part of this guide. See Introduction. Please refer to other sources if necessary.

Subspecies helena







Ripart's Anomalous Blue [Polyommatus ripartii]

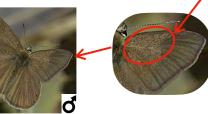
Upperside MALE

Anomalous and Ripart's are the most widespread of the current list of Anomalous Blues. They are easily confused. with the male uppersides virtually indistinguishable. However, a view of the underside should readily identify.

Upperside MALE









Veins: both sexes usually have veins darker than the ground colour

On both sexes, Colour: uniformly brown Fringe: dark, especially fore-wing

Key Identification Features







Upperside FEMALE



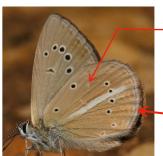
Female similar to male but without androconial patch



Uppersides of Ripart's and Furry Blue females can be very similar. Click here for a comparison

Underside MALE & FEMALE

Sexes similar, female usually has bolder markings



Outer spots: spot o2 is frequently

Stripe on hind-wing: broad white stripe distinguishes from **Anomalous Blue**

Ripart's underside similar to Damon and some Furry Blues. Click here for a comparison.

Subspecies pelopi

Pelopi with a fainter, less bold underside hind-wing white stripe flies in southern Balkans and Greece.

Form exuberans

Form exuberans with a very dark upperside is found locally in northwestern Italy, west of Turin.

Form agenjoi is found in notheastern Spain. It has a reduced underside hindwing white stripe which is sometimes absent.

Form agenjoi

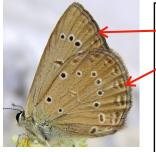
Upperside FEMALE





Submarginal marks: row of dark marks on hindwing, with orange marks that can be very faint.

Underside MALE & FEMALE



Submarginal marks:

Usually a row of marks on both wings which are darker than the ground colour

Anomalous Blue underside could be confused with Mazarine Blue underside. Click here for a comparison.

IDENTIFYING ANOMALOUS BLUES

IN FRANCE, ITALY and SPAIN [See notes on 'local' species below]

FRANCE/ITALY: Only Ripart's is present in France and Italy except around the Cogne valley in northwestern Italy where Ripart's is absent and only Piedmont [no white underside stripe] is present.

SPAIN: Allowing for some limited overlap, Anomalous Blues are only found in three zones. Each zone has only one species flying in it as follows: [i] Ripart's in the north [see Maps] [ii] Oberthur's [usually no white underside stripe] in eastern central [iii] Andalusian [usually with a white underside stripe] in south/south east.

Similar 'Local' Species of Anomalous Blue

with summary distributions:

- Andalusian [Polyommatus violetae] Sierras de Cazorla, de Segura, de La Sagra, de Almijara
- Grecian [Polyommatus aroaniensis] mountain areas of Greece
- Higgins' [Polyommatus nephohiptamenos] northeast Greece/Bulgaria mountains
- Kolev's [Polyommatus orphicus] southwestern Bulgaria
- Oberthur's [Polyommatus fabressei] east central Spain [Guadalajara.Soria.Teruel]
- Piedmont [Polyommatus humedasae] northwestern Italy, around Cogne valley
- Polyommatus timfristos recent species found on Mounts Parnassos and Timfristos in Greece.

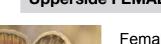
Above are described fully in Part 2. See Introduction. Please refer to other sources if necessary.













Veins on MALE and FEMALE uppersides generally noticeably darker than the ground colour.

Anomalous v Ripart's Anomalous

- Distribution: will only be found flying together in Greece and southern western Balkans
- MALE upperside: virtually indistinguishable

Androconial patch: Patch of female attracting scent

scales usually visible in basal area

of MALE upperside fore-wing.

- FEMALE upperside: orange submarginal marks on the hind-wing identify Anomalous
- MALE & FEMALE underside: white stripe identifies Ripart's.

Note: All the 'Local' species of Anomalous Blue listed below are very similar to Anomalous and Ripart's. The presence/absence of the underside white stripe can help to distinguish one from another but this is not totally reliable.

absent or vestigial

Brown and Northern Brown Argus are the most widespread species of a

confusing variable complex with no reliable consistent features that can

separate them across Europe. The notes and comparisons of 'typical'

specimens below should help to identify using a combination of factors.

Upperside MALE & FEMALE



Fore-wing cell mark: normally a prominent dark mark

Colour: brown, usually with no blue scaling

Submarginal marks: generally a complete row of strong orange marks on both wings. These can taper off towards apex of fore-wing, especially on male.

Fringe: white, frequently a brown tinge in middle section of fore-wing



Fringe lines: often has dark lines on both wings

Upperside might be confused with females of other species. These features of Brown Argus should help distinguish: [i] strong orange marks on both wings [ii] no blue [iii] dark fore-wing cell mark [iv] fringe lines

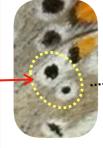
Underside MALE & FEMALE

Sexes similar, female slightly browner

Colon punctuation mark shape: This is formed on the hind-wing by spot o1 and the displaced spot o2

which is sometimes

only a tiny mark.







Key Identification Feature

Colon shaped feature on underside hind-wing [found on all four species on this page]:

This distinctive feature is created by outer spot o2 being displaced inwards from the row of outer spots. This produces a colon punctuation mark shape roughly at right angles to the adjacent wing edge. The position of spot o2 can vary but will never be part of a smoothly curved row of outer spots.

Brown Argus v Northern Brown Argus

- Distribution: Significant differences [see Maps]
- Altitude: Brown Argus usually below 1000m, rarely above 1500m. Northern normally flies above c. 1000m in mountain regions of Europe and at lower altitudes in north Europe.
- Upperside submarginal orange marks: Both sexes of Brown Argus have almost complete rows on both wings. These marks are reduced in size/number on Northern [often just one or two]. On the male usually only present on hind-wing.
- Upperside colour: Brown Argus is brown whilst Northern can be dark brown, tending to almost black.
- Fringe: Brown Argus normally has dark fringe lines and its fringe often has a dark brown tinge. Northern frequently without these features or, if present, usually less prominent.

Southern Brown Argus v Southern Mountain Argus

- Upperside submarginal orange marks: Both sexes of Southern Brown generally have bolder and brighter marks
- Underside hind-wing ground colour: Southern Brown is usually brown compared to the grey of Southern Mountain.

Southern Brown Argus [Aricia cramera]

Southern Brown Argus flies in the Iberian peninsula where it replaces the Brown Argus [except in parts of northern Spain]. It is similar but has brighter, bolder orange submarginal marks than Brown Argus, especially on females. The orange marks can appear as an unbroken orange band crossed by the dark vein lines.

Note: Also found in Balearics and Sardinia.





IDENTIFY BY LOCATION

SPAIN and PORTUGAL

Present:

Southern Mountain Argus in mountains, Southern Brown Argus [except north west Spain] Absent:

Brown Argus [except Pyrenees], Northern Brown Argus

PYRENEES & CEVENNES

Present: Brown Argus, Northern Brown Argus, Southern Mountain Argus

REST of EUROPE

Present: Brown Argus, Northern Brown Argus. See Distribution Maps

Upperside MALE & FEMALE

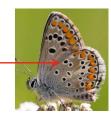
Sexes are similar, although: [i] females usually have more upperside orange submarginal marks, especially on the fore-wing, [ii] males can have much reduced [almost absent] orange submarginal marks.





Underside MALE & FEMALE

Sexes are similar with the distinctive colon punctuation mark shape on the hind-wing



Variation found in northern regions includes:

[i] upperside fore-wing cell mark



can be white. [ii] black spots on underside can reduce to white patches.



Southern Mountain Argus [Aricia montensis]

Similar to Northern Brown Argus but rarely found flying together [see Location notes opposite]. Slight differences to look for are: [i] upperside often has more



complete orange submarginal marks, [ii] underside hindwing ground colour is greyish rather than brown.



Similar 'Local' Species

are listed below:

- Blue Argus [Aricia anteros] Croatia south through Balkans to Greece
- Cretan Argus [Kretania psylorita] Crete
- Eastern Brown Argus [Kretania eurypilus] Greece
- Spanish Argus [Aricia morronensis] mountainous
 - areas of Spain. These species will be described in more detail in the second part of this guide. See Introduction.

Please refer to other sources if necessary.



Male and female are similar

Colour: uniformly brown

Wing border: bright white

Upperside MALE

Colour: silvery blue ground colour



Upperside FEMALE

Colour:

uniformly brown,

sometimes a

blue tinge in

basal area

Wing border: very broad, dark brownish border



Submarginal marks: None

May be confused with male Glandon Blue. However,

Glandon usually favours a rocky high altitude habitat

above the tree line whereas Silvery Argus normally

found in or around woodland above c. 1000m.

Fore-wing cell mark: generally a noticeable dark mark



Key Identification Feature

Underside hind-wing stripe:

The presence on the underside hind-wing of [i] a white stripe [positioned as shown below] and [ii] orange submarginal marks, will distinguish Silvery Argus from all other species in this guide.







Geranium Argus and foodplant

Upperside MALE & FEMALE



Hind-wing submarginal marks: \ Some small orange marks are usually present

on the female but can be absent. Occasionally very faint orange marks are visible on the male.

Key Identification Features

Underside hind-wing stripe:

The presence of [i] a white stripe [positioned on underside as shown below] and [ii] orange submarginal marks, distinguishes Geranium Argus from all other species in this guide.

Foodplant:

Geranium Argus is closely associated with Geranium species, the larval foodplant. It is commonly found nectaring on these, especially Wood Cranesbill [Geranium sylvaticum].

Underside MALE & FEMALE

Sexes similar, female usually slightly browner

Fore-wing

cell mark:

generally a

noticeable

small dark

mark



cell mark [tends to be faint] spot o3



Submarginal marks:

spot o4

the faint orange marks are slightly darker than the ground colour but are usually quite obvious

The uppersides of **FEMALE Silvery** Argus and MALE Geranium Argus are similar and may be confused with each other. They are also similar to the uppersides of FEMALE Damon Blue and FEMALE Mazarine Blue.

An underside view is necessary to make a positive identification.

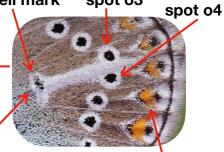
Note: The uppersides of Anomalous Blue species are also similar. However, Silvery Argus and Geranium Argus probably never occur in the same habitat as Anomalous Blue species which usually favour hot, arid localities.

Underside MALE & FEMALE

Sexes similar, female usually slightly darker



cell mark spot o3



Submarginal marks:

usually a complete

row of orange marks

on hind-wing

White stripe: broad stripe runs from the cell mark and between outer spots o3 and o4. This positioning distinguishes from the Silvery Argus [see opposite].

White stripe:

Broad stripe runs below the cell mark and through outer spot o4. This positioning will distinguish from the Geranium Argus [see opposite].

Subspecies scandica

Scandica flies in central Sweden and southern Finland. Uppersides of males are brighter with greyish, narrower dark wing borders.

Wing border: dark and

wide. Usually more

diffuse on the female.

Upperside MALE and FEMALE

Colour: the normal lowland forms of both sexes have a dull blue ground colour. However, the extent of dark brown/black scaling varies greatly, generally increasing with altitude.



Submarginal marks:

row of dark spots on both wings which are often obscured by the border, especially on the forewing and on the female.





Form obscura



Obscura has dark scaling covering roughly half the upperside. More extreme forms can also be found.



The Large Blue may be confused with Alcon Blue and lolas Blue, both of which can be large in size. Differentiate by Large Blue's:

[i] larger and bolder underside markings [ii] double row of black submarginal marks on both underside wings [see opposite].

Also, note that: [a] **lolas**, unlike the Large Blue, has an almost straight row of underside forewing outer spots. Click here for a comparison.

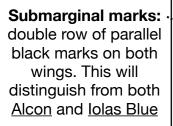
[b] Alcon female uppersides can have visible large spots on the fore-wing which may appear similar to darker forms of the Large Blue.

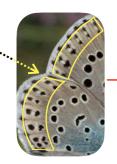


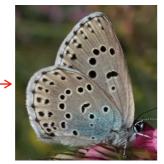
Outer spots: row of large dark oval spots on the fore-wing which are normally somewhat larger on the female. Diffusion of the wing border can obscure these spots. A few small dark spots may be present on the hind-wing.

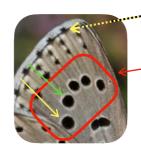
Underside MALE & FEMALE

Male and female are similar.









Fringe lines: usually dark partial lines

Fore-wing outer spots: row of outer spots is distinctly curved with spot 5 [vellow arrow] normally further inwards from the wing edge than spot 4 [green arrow]. This distinguishes from lolas Blue.

Similar 'Local' **Species**

which might confuse are Dusky Large Blue [Phengaris nausithous] and Scarce Large Blue [Phengaris teleius] colonies of which are found across Europe. Although both species are usually always found on or close to their foodplant, Great Burnet [Sanguisorba officinalis], Large Blue can fly with both these species and also Alcon Blue. In fact all four can be found flying together. Dusky and Scarce rarely display their uppersides. To help distinguish see comparisons below. Note: Dusky and Scarce Large Blue will be described in more detail in the second part of this guide. See Introduction. Please refer to other sources if necessary.

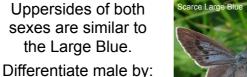
Dusky Large Blue



Medium to dark brown ground colour.

Usually easily distinguished from Large. Scarce Large and Alcon by its underside colour and marks.

NO submarginal marks on either wing



[i] smaller outer spots on fore-wing.

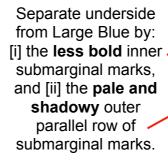
Note: these spots can be faint or absent

[ii] pale patches between the dark veins.





Scarce Large Blue









To distinguish Scarce Large from Alcon compare distances x and y between the marks shown above. On Scarce Large **x** roughly equals **y**, whilst on Alcon **x** is noticeably shorter than y. This difference usually more evident on fore-wing.

Note: Cited differences in colour and spot size are considered unreliable.





Key Identification Features

Large size and large upperside fore-wing outer spots:

The uppersides of male and female are

similar with prominent large dark fore-

wing outer spots. Together with their

large size, this generally makes the

Large Blue easy to distinguish from

the other species in this guide.









The uppersides of these two variable species can be similar. An underside view is often required to make a positive identification.

Terms





Upperside MALE



Wing border: dark, well defined, and relatively wide. Fore-wing border usually broadens slightly towards the apex of the wing.

Colour: variable, usually dark

grey/brown with noticeable

blue basal scaling

Upperside FEMALE



Outer spots:

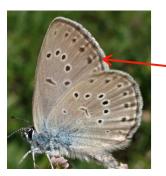
some large dark spots are present on the fore-wing but are often faint or invisible. These spots will help distinguish from Iolas Blue [see opposite].

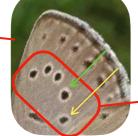




Underside MALE & FEMALE

Male and female are similar





Fore-wing outer spots: Row of spots is distinctly curved with spot 5 [yellow arrow] normally further inwards from the wing edge than spot 4 [green arrow]. This distinguishes from Iolas Blue [see opposite].

Subspecies rebeli

Alcon and rebeli are very similar but have different foodplants, Marsh Gentian [Gentiana pneumonanthe] for Alcon and Cross Gentian [Gentiana cruciata] for rebeli, thus they have different habitats with rebeli usually being found at higher altitudes.

Note: Differences in the wing patterns are frequently cited as a means of separating alcon and rebeli. The reliability and consistency of these features are considered uncertain and therefore not included here.

Key Identification Feature

Size:

Alcon and lolas are, on average, noticeably larger than most of the other species in this guide, except the Large Blue.

Alcon v lolas

- MALE upperside: Alcon wing border generally appears broader than lolas.
- **FEMALE** upperside: Fore-wing outer spots indicate Alcon and hind-wing submarginal marks indicate lolas.
- MALE & FEMALE underside:
- [i] Row of fore-wing outer spots curved on Alcon and almost straight on lolas.
- [ii] lolas usually has a much paler ground colour than Alcon.
- Foodplant: lolas has a close association with its main foodplant, Bladder Senna [Colutea arborescens], with males hunting females around the scattered shrubs.

Upperside MALE



Wing border:

Iolas Blue [lolana iolas]

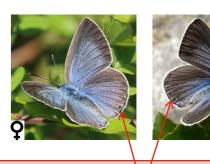
dark and narrow. Fore-wing border usually broadens slightly towards the apex of the wing.

Upperside FEMALE





Colour: variable, generally appears half brown, half blue

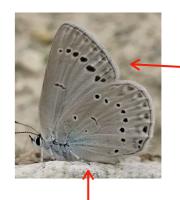




row of dark marks on hind-wing, which can be faint. These marks will distinguish from Alcon Blue [see opposite].

Underside MALE & FEMALE

Male and female are similar



Colour: ground colour is usually paler than the Alcon Blue [see opposite]



Fore-wing outer spots: Row of spots is **gently** curved [almost straight]. This distinguishes from Alcon Blue [see opposite] and Black-eved Blue.

Alcon and lolas might be confused with:

[a] the upper and undersides of Black-eyed and Green-underside Blue. However, both:

[i] are noticeably smaller

[ii] have female uppersides with **no** prominent marks or spots

[iii] have differences in the underside markings. Click below for a comparison.

[b] the underside of Large Blue although the Large Blue usually has larger and bolder markings than both Alcon and Iolas.

Click here for a comparison of the undersides of all the above species.

Upperside MALE



Wing border:
dark, usually
well defined, and
relatively wide.
Fore-wing
border usually
broadens
towards the
apex of the wing.





Upperside FEMALE



Colour: brown with blue basal scaling which can vary greatly. The blue is often extensive but occasionally may be almost absent.



Underside MALE & FEMALE

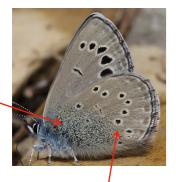
Male and female are similar.

The features below help distinguish from Green-underside Blue

Fore-wing outer spots 4 and 5: spot 5 is normally further inwards from the wing edge than spot 4







Hind-wing outer spots: generally a complete row





Submarginal marks: usually some darkish marks, even if very faint These two variable species have similar uppersides.

A view of the underside is necessary to separate and make a positive identification.

Terms

Key Identification Features

Underside outer spots:

Black-eyed and Green-underside both have noticeably bolder and larger outer spots on the underside fore-wing than on the underside hind-wing.

Black-eyed Blue v Green-underside Blue

The undersides of both sexes of both species can look similar. Differences which help separate them are illustrated below.

For a quick comparison click here

Location may also help as Black-eyed is restricted to southwestern Europe.



Both Black-eyed and Green-underside might be confused with:

[a] <u>Alcon Blue</u>; the male and female uppersides of which are similar. However, Alcon Blue is a noticeably **large** species.

[b] <u>Amanda's Blue</u>; the male upperside of which is similar. An underside view is necessary to make a positive identification.

[c] <u>lolas Blue</u>; which can usually be differentiated by its **large** size but has similar:

[i] female uppersides that can usually be distinguished by their small dark submarginal marks on the hind-wing.

[ii] male and female undersides. <u>Click here</u> for a comparison.

Upperside MALE







Wing border: variable, usually dark, relatively wide and well defined. Fore-wing border usually broader than hind-wing and widens towards the apex of the wing

Upperside FEMALE



Colour: etimes comple

sometimes completely brown but generally has pronounced basal blue scaling [as shown opposite] though this is variable. Fresh specimens have almost a black ground colour.

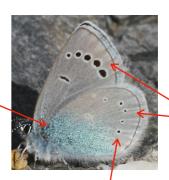
Underside MALE & FEMALE

Sexes similar with female usually slightly browner.

Features below help distinguish from Black-eyed Blue

Fore-wing outer spots 4 and 5: spot 5 is in line with spot 4

Basal area: usually a noticeable green-blue flush





Submarginal marks: NO dark marks

Hind-wing outer spots: frequently small, vestigial or absent



Subspecies schneideri

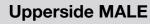
The most dramatic variation of Green-underside is *schneideri*, which flies in Fennoscandia, with females that have blue uppersides like males.

Small and Osiris Blue are noticeably smaller than the other species in this guide. Male uppersides are quite different but female uppersides are similar. The undersides are almost indistinguishable. Compare using the notes below.

Terms 🔷











Colour: both sexes are dark brown/black and frequently look more slate grey than brown. Males may have a slight blue dusting [as shown above]

Upperside FEMALE



PROBABILITY
To help distinguish
Small Blues from
female Osiris
try using probability,
i.e. take account
of the number of
identifiable males
which are present.



Usually no blue scaling which might help distinguish from Osiris

Key Identification Features

Small Blue v Osiris Blue

- Size: Small Blue is <u>markedly smaller</u> than the other species in this guide. Osiris is, on average, slightly larger than Small Blue.
- Foodplant: Osiris has a close association with its foodplant Sainfoin [Onobrychis species]. Thus a specimen found on Sainfoin will most likely be Osiris. Small Blue feeds on Kidney Vetch [Anthyllis species].
- MALE upperside: Small Blue is grey/dark brown/black, sometimes with a blue dusting. Osiris is bright blue.
- FEMALE upperside: Blue scaling will usually only be found on Osiris and NOT on Small Blue.
- MALE & FEMALE underside: Osiris and Small Blue have almost indistinguishable undersides. However.
 Osiris generally has [i] more basal blue on hind-wing, [ii] a slightly more silvery colour than Small Blue.

Note: Differences in the underside spot pattern are frequently cited as a means of differentiating these two species. The reliability and consistency of these features are considered uncertain and therefore not included here.

Osiris Blue [Cupido osiris]

Upperside MALE



Colour: bright blue, which clearly distinguishes from Small Blue



Wing border: dark and narrow

Upperside FEMALE







Osiris on Sainfoin

Colour: generally a deep dark brown sometimes with basal blue scaling [as shown above]. If blue scaling is present it will: [i] usually be more extensive than found on Small Blue males, [ii] help to distinguish from the female Small Blue.

Underside MALE & FEMALE





The undersides of both sexes are almost indistinguishable from Osiris Blue

Similar 'Local' Species

which might confuse is Lorquin's Blue [Cupido lorquinii]

Lorquin's is only found in southern Iberia and has:
[i] the same foodplant as the Small Blue, and [ii] males with bright blue uppersides.

Lorquin's will be described in more detail in the second part of this guide. See Introduction.

Please refer to other sources if necessary.



[i] Both Small and Osiris might be confused with:

[a] <u>Provencal</u> and <u>Short tailed</u> Blues with vestigial/absent tails. <u>Click here</u> for guidance on recognising missing tails.

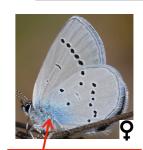
[b] Underside of Mazarine Blue.

Click here for an explanation of how to separate.

[ii] Both sexes of Small Blue and Osiris females could be confused with <u>Mazarine Blue</u> females which have similar uppersides. However, Mazarine is, on average, somewhat larger.

[iii] Male Osiris upperside is similar to male <u>Holly Blue</u>. Distinguish by the **fore-wing fringe lines** on Holly Blue.

Underside MALE & FEMALE



Usually more basal blue on hind-wing than is found on Small Blue

The undersides of both sexes are almost indistinguishable from Small Blue



Upperside MALE



Colour: noticeable bright sky blue

Wing border: dark and narrow



Fringe lines: both sexes usually have complete dark fringe lines on both fore and hind-wings

Submarginal marks: sometimes a very faint row of dark marks are present on hind-wing

Upperside FEMALE



Submarginal

marks: row of

orange and

black marks on

both wings.

Frequently

incomplete on

fore-wing, as

shown above.





Often there are some small blue outer marks here. If present, these will distinguish from the

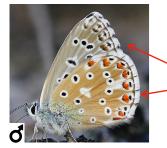




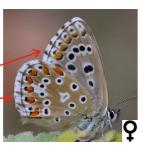
Underside MALE and FEMALE

Male and female are similar but female is usually browner

Chalkhill Blue.



Complete fringe lines on both wings



The undersides of both sexes are very similar to Chalkhill Blue although Adonis usually has bolder spots

Key Identification Features

Fringe lines or 'chequering':

Adonis and Chalkhill typically have noticeable dark fringe lines visible on the upper and underside of BOTH wings. usually fainter on hind-wing.

SOME or ALL of these lines, which vary in width/shape, are complete, i.e. they cross the fringe or reach a point close to the outer edge of the fringe. This is unlike lines found on other species which usually are a partial projection into the fringe from the end of the vein. See below.





Adonis Blue

Notes: [i] Baton Blue, Chequered Blue, Geranium Bronze, are the other species in this guide with bold fringe lines on both wings. All are quite different and easily identified, [ii] male Adonis upperside is similar to male Holly Blue which has bold fringe lines but usually ONLY on the fore-wing.

Adonis v Chalkhill

FEMALE uppersides:

Separate by:

[i] Blue scaling - usually only found on Adonis

[ii] Outer submarginal marks if present, blue on Adonis and white on Chalkhill [iii] Probability - with reference to

the number of males present.

MALE and FEMALE undersides:

Differentiation may be possible by the spots on Adonis which are generally bolder than Chalkhill. Otherwise an upperside view will be required for identification.

Upperside MALE



Fringe lines: both sexes

normally have complete dark

fringe lines on both wings.

Usually bolder on fore-wing.

The Chalkhill Blue shows great variation across its wide range with many regional races and forms. A 'typical' specimen is described below.

Wing border: dark wide border on fore-wing



Submarginal marks: dark submarginal marks

on hind-wing which normally have some degree of white surround

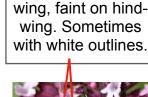
Upperside FEMALE



Colour: dark brown. usually no blue

Submarginal marks: row of orange and black marks on both wings.

Frequently faint on forewing, as shown here.



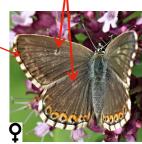
Cell marks:

usually noticeable

dark mark on fore-

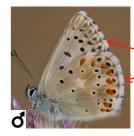


If white outer submarginal marks like these are present. this will distinguish from Adonis

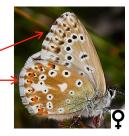


Underside MALE and FEMALE

Sexes are similar but female is generally browner



Complete fringe lines on both wings



Similar 'Local' Species

which might confuse are listed below with a summary of their distribution:

- Azure Chalkhill Blue [Lysandra caelestissima] east-central Spain.
- Provence Chalkhill Blue [Lysandra hispana] coasts of northwest Italy, south France, east Spain. Inland in north Spain from north east westwards, south of Pyrenees, towards southern Cantabrians.
- Spanish Chalkhill Blue [Lysandra albicans] Iberian Peninsula.

These species will be described in more detail in the second part of this guide. See Introduction. Please refer to other sources if necessary.

Upperside MALE and FEMALE



Cell marks:

usually noticeable dark marks on both wings of males. Can be faint on hind-wing.

Fringe lines:

both sexes have bold dark fringe lines usually reaching close to the outer edge, especially on the fore-wing

Submarginal marks:

rows of black marks on both fore and hind-wings. These marks are not always visible [especially on the fore-wing] as they frequently merge with the wing border.



Colour:

sexes are similar but females are usually darker with much less blue than males

Cell marks:

normally difficult to see on females as they blend with the darker ground colour

Underside MALE and FEMALE





NO orange marks here

Hind-wing submarginal marks s1 and s2:

Baton normally has NO orange marks in s1 and s2 [as shown above]. This usually distinguishes from Chequered Blue [see opposite].





These two species can be difficult to separate. An underside view is usually necessary to confirm **identification.** Compare using the notes below.

Key Identification Features

Fringe lines or 'chequering':

Uppersides of both sexes of Baton and Chequered are similar with the bold fringe lines on both wings, commonly referred to as 'chequering', being a prominent feature.

Baton v Chequered

Underside hind-wing marks s1 and s2:

Baton and Chequered are best differentiated by the presence/absence of orange colouring in these underside marks. Baton has an incomplete band of orange submarginal marks on the underside hindwing with NO orange marks in s1 and s2 whilst Chequered has a complete band of orange. See illustrations below.

Note: Geranium Bronze has similar bold fringe lines but should not cause any confusion.

Similar 'Local' Species

which might confuse are listed below with a summary of their distribution:

- Bavius Blue [Pseudophilotes bavius] northwestern Romania, southern Balkans and southern Greece
- Eastern Baton Blue [Pseudophilotes vicrama] eastern Europe including Balkans & Greece
- False Baton Blue [Pseudophilotes abencerragus] southern Spain and Portugal
- Panoptes Blue [Pseudophilotes panoptes] Iberian Peninsula
- Sardinian Blue [Pseudophilotes barbagiae] endemic to Sardinia.

These species will be described in more detail in the second part of this guide. See Introduction. Please refer to other information sources if necessary.

Chequered Blue [Scolitantides orion]

There are two distinct populations [i] subspecies orion - found in coastal areas of southern Fennoscandia, [ii] subspecies lariana - found in central/southern Europe. They are similar in appearance. The main difference is the uppersides of lariana [described below] which are generally darker than orion.

Upperside MALE and FEMALE

Cell marks:

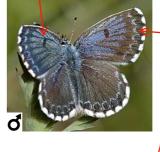
prominent dark mark on fore-wing. Sometimes a faint mark on hind-wing.

Colour:

sexes are similar with widely varying amounts of blue scaling. Females usually have less blue, sometimes with almost none. The brown ground colour can be very dark, almost black, even in males.

Submarginal marks:

rows of black marks usually bordered by pale blue/white scales on both fore and hind-wings. These bright surrounds can help distinguish from Baton Blue but they are not always visible as they can merge with the dark ground colour.



Fringe lines:

both sexes have bold dark fringe lines usually reaching close to the outer edge, especially on the fore-wing



Underside MALE and FEMALE





Orange marks present here

Hind-wing submarginal marks s1 and s2:

Chequered usually has noticeable orange marks in s1 and s2 making a continuous band of orange [as shown above] This usually distinguishes from Baton Blue [see opposite].







Lang's Short-tailed Blue [Leptotes pirithous]

Upperside MALE

Wing border: dark and narrow

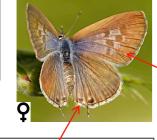


Might be confused with Shorttailed and Provençal Short-tailed males. However, an underside view easily separates.

Upperside FEMALE

Tail: prominent tails on both sexes

Colour: mainly brown, usually some basal blue scaling



Hind-wing submarginal marks: two dark marks close to the tail

Fore-wina

spots: a group of large vague spots which can be obscured by the ground colour

Key Identification Features

[i] Underside fore-wing dark stripe [ii] Underside hind-wing dark mark in s2:

Lang's is best differentiated from other species with tails by its underside wing pattern with these two distinctive features. See below.

Underside MALE and FEMALE

Dark stripe: Noticeable stripe near front edge of fore-wing



Dark mark in s2: Usually a large dark mark present

Lang's underside similar to Long-tailed and Geranium Bronze on this page. Differentiate by above features.

Long-tailed Blue [Lampides boeticus]

Upperside MALE





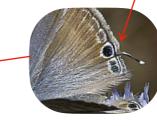
Tail: prominent tails on both sexes

Upperside FEMALE



Colour: brown ground colour with variable basal blue scaling





Colour: amount of blue ground

colour is variable

Hind-wing submarginal marks:

one or two [sometimes more]

prominent, roughly circular,

dark marks usually with white

outlines close to the tail. Boldest

mark is normally the one on the

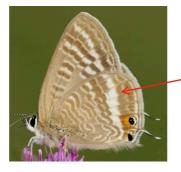
outer side of the tail.

Key Identification Features

[i] Upperside hind-wing submarginal marks [ii] White band on underside hind-wing:

Differentiate Long-tailed from other species with tails by these distinctive features [see above and below]

Underside MALE and FEMALE



Distinctive white band:

This white band on the hindwing should distinguish from the similar Lang's and Geranium Bronze on this page.







Maps

Geranium Bronze [Cacyreus marshalli]

Upperside MALE and FEMALE



Hind-wing submarginal marks: single dark mark close to tail



Fringe lines: bold dark lines. especially on fore-wing

> Colour: uniformly brown



Tail: prominent tails

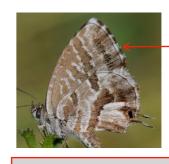
Fore-wing cell mark: occasionally a faint, dark mark [as shown here]

Key Identification Feature

Bold dark fringe lines on both wings:

Geranium Bronze is distinguished from other species with tails by its prominent dark fringe lines. These are usually bolder on fore-wing [see below]

Underside MALE and FEMALE





Bold dark fringe lines:

This should distinguish from the similar Lang's and Long-tailed on this page.

Short-tailed Blue [Cupido argiades]

Upperside MALE



Fore-wing cell mark: occasionally a faint, dark mark [as shown here]

> Wing border: dark border can diffuse inwards appearing broader

Tail: prominent tails on both sexes

 ∇

Hind-wing submarginal marks: sometimes has a distinct, complete row of small marks [as shown]

Upperside FEMALE



Colour: mainly black ageing to brown, usually with some degree of basal blue scaling



Submarginal marks: normally has an orange mark close to the tails

Underside MALE and FEMALE





Hind-wing submarginal mark s6:

Normally has a visible amount of orange in mark s6 and sometimes additional orange marks in s5 and s4 [as shown above]

This usually distinguishes from Provençal opposite.

These two species can be difficult to separate.

An underside view is usually necessary to confirm identification.

Key Identification Feature

Short-tailed v Provencal

Underside hind-wing submarginal mark s6:

Short-tailed and Provençal are best differentiated by this underside mark. Short-tailed normally has a large orange mark whilst Provençal usually has a faint mark with NO significant orange. See illustrations below.

The uppersides of both species are variable and difficult to separate. <u>Click here</u> for a detailed comparison.

Note: Male Short-tailed and Provençal could be confused with the male upperside of <u>Lang's Short-tailed Blue</u>. However, Lang's is easily differentiated by its distinctive underside wing pattern.

🕜 ABSENT TAILS -

Sometimes the tail on these two species is vestigial/absent due to wear etc. This may lead to confusion, especially with Osiris or Small Blues. However, there is generally a kink in the dark marginal line indicating where the tail would have been which should help to separate. This kink, visible on both upper and underside, is illustrated in the photos below.

Tail present and kink present



Worn specimen with tail

absent. Despite this the

kink is still clearly visible

Tail
vestigial
but
kink still
visible









Maps 🔷

Provençal Short-tailed Blue [Cupido alcetas]

Upperside MALE



Wing border: sharply defined narrow dark border



Submarginal marks: frequently has a single prominent mark close to the tail

Upperside FEMALE

both sexes have a short tail, sometimes vestigial

Tail:

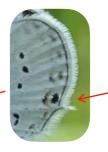


Colour: black/dark brown, usually with no basal blue scaling

Hind-wing submarginal marks: normally has NO marks

Underside MALE and FEMALE





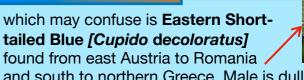


Hind-wing submarginal mark s6:

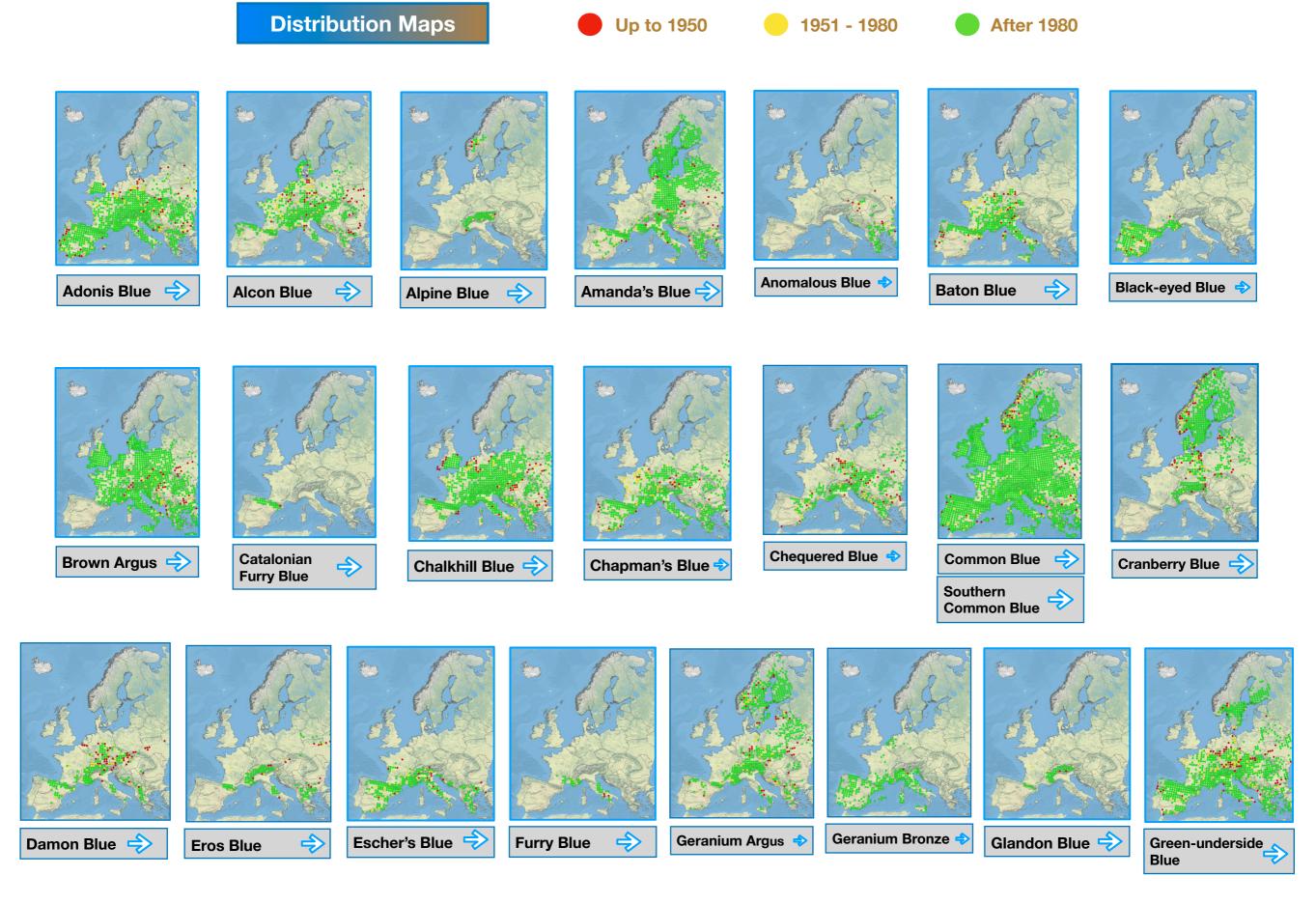
Normally a faint mark with NO significant orange.

This usually distinguishes from Short-tailed Blue opposite.

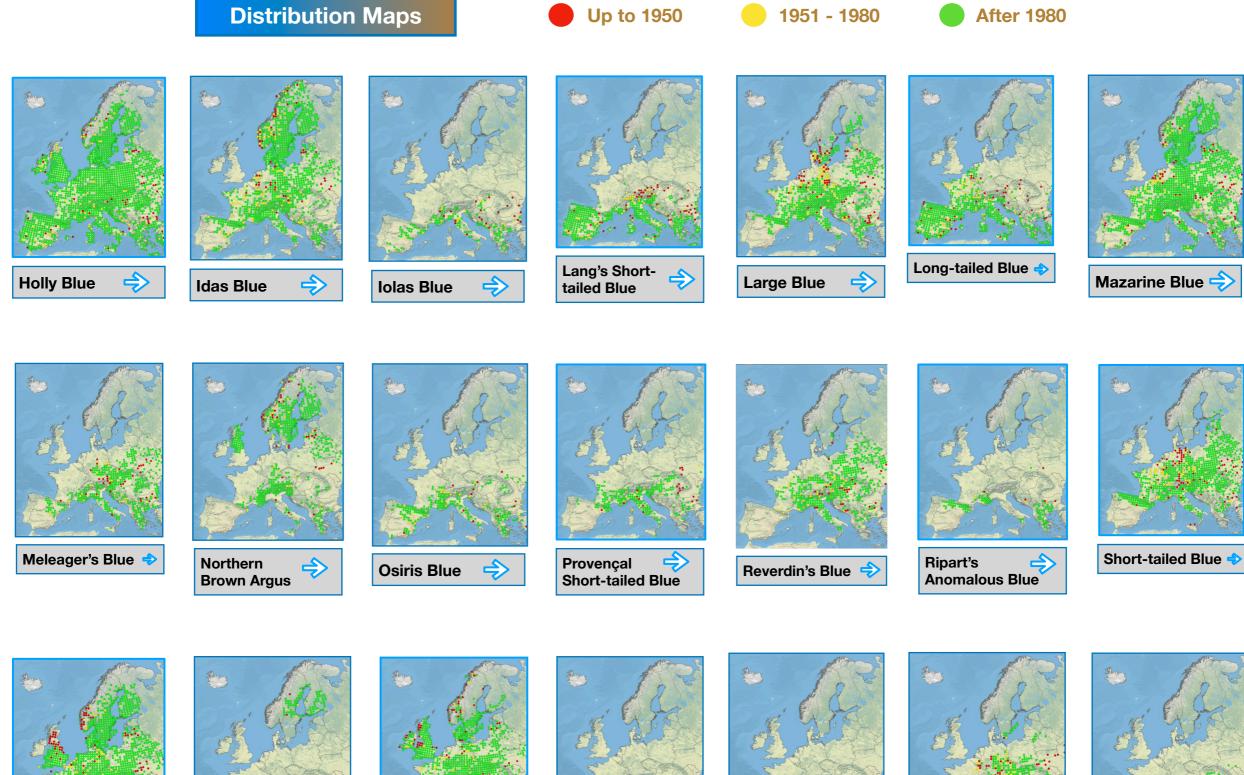
Similar 'Local' Species

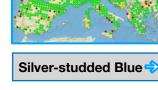


and south to northern Greece. Male is dull blue with broad wing borders and a fore-wing cell mark. *Decoloratus* will be described in detail in the second part of this guide. See Introduction. Please refer to other sources if necessary.



[Continued on next page]

















Appendix

Geography

The geographical area covered is as shown on the Distribution Maps excluding the coast of northern Africa.

Taxonomy

The current EBG checklist of European butterflies has been followed which comprises species found in Europe up to the eastern boundary of the European Union. This checklist was compiled by an international committee of taxonomic experts.

Acknowledgements

The distribution maps are reproduced by kind permission of LepiDiv Projekt. For more information please visit LepiDiv

With special thanks for information and photographs to Bernard Watts of www.butterflyeurope.co.uk

Many thanks to the following for information and/or help with photographs:
Mike Adams, Vincent Baudraz, Paul Browning, Peter Bygate, Bob Eade, Sam Ellis,
Roger Gibbons, Nick Greatorex-Davies, John Green, Peter Hunt, Iain Leach, David Moore,
Guy Padfield, Matt Rowlings, Mark Searle, Simon Spencer, David Tomlinson.

©Copyright Butterfly Conservation: This guide is made available for private use only. Any form of commercial usage is forbidden.