



Argynnis paphia
by Svend Rastrup

Denmark

Field Guide for butterfly identification

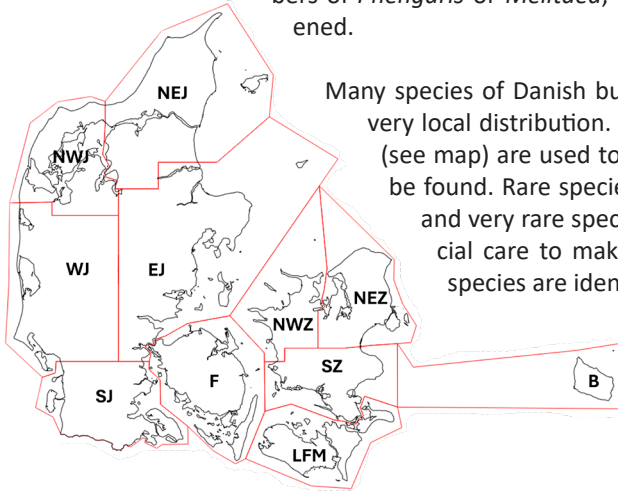
The **European Butterfly Monitoring Program (eBMS)** aims to promote the monitoring and protection of this group of insects. This program is based on thousands of volunteers who systematically count butterflies in accordance with simple, uniform rules for the entire continent. Using all the data collected by volunteers, we can determine the state of the butterfly population and protect them more effectively.

This Field Guide aims to facilitate the task of field identification of the **71 butterfly species seen in Denmark**. The guide also serves as a support tool for those involved in the monitoring of butterflies and describes the standardised methodologies used by eBMS.

Counting butterflies will help to protect them!

Butterflies of Denmark

Denmark (42.924 km²) lies at the northern-most part of central Europe and is divided into the Atlantic zone to the west and the Continental zone to the east. Due to its position at the southern border of the boreal zone, many species of butterflies have their northern-most populations in Denmark. Nature in Denmark is heavily impacted by agriculture and so species that thrive in eutrophicated ecosystems and on crops, like members of *Pieris* or *Aglais*, are common, while species relying on nutrient poor habitats, like members of *Phengaris* or *Melitaea*, are increasingly rare and threatened.



Many species of Danish butterflies are rare, and/or have a very local distribution. For such species, **regional codes** (see map) are used to indicate where the species may be found. Rare species are also indicated with an “R” and very rare species with a “VR”. Always take special care to make sure, that such rare and local species are identified correctly.

65 species of butterflies are considered to have established populations in the country, 14 species are recently extinct, and 6 species are observed as transient visitors.

Why monitor butterflies?

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

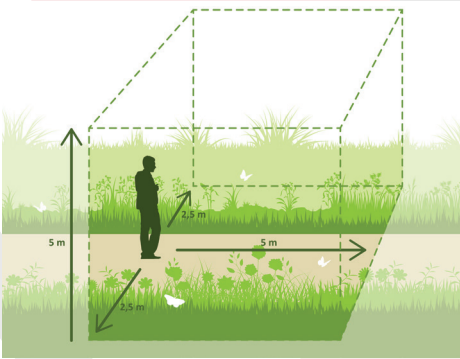
How to use this field guide

In this field guide you can find images of the **71 butterfly species** currently found in Denmark. These butterflies belong to 5 different families, they are divided into groups according to this (you will find them in the margins of the page). Every butterfly species has both a common English name and a scientific name (written in *italics*). Information is included for each species’ flight period, size category and Danish conservation status (see the legend on the back cover of the Field Guide). Butterfly identification is often best done using photographs to help you to recognise important characteristics. Check the diagnostic characteristics highlighted in this guide with the arrows or circles and the remarks to help you with the identification. Note the size indicator next to the species, as the size of the photo does not match the size of the butterfly in reality. See the butterfly symbols to know the size: **small**, **medium** or **large**.

How to count butterflies?

Butterflies can be counted everywhere: in the meadow, in the forest, park, garden, both in the countryside and in the city. Wherever it is, every count is important. As part of the European Butterfly Monitoring Program (eBMS), data is most often collected during the “**Butterfly Walk**”, called transect. This is a fixed route where butterflies are counted regularly, preferably once a week or two. It will be most convenient to mark your transect near your home or work so that you can visit it often.

Another option is to register the butterflies during the “**15-min Count**”. It consists in counting butterflies for 15 minutes in a given area. It can be a path, a restricted area (e.g. a garden) or just a specific point.



Basic rules when counting butterflies:

- Count all the butterflies of each species you encounter in an imaginary cube: 2.5m to the left and right, and 5m in front of and above you
- Walk through the transect/area at a slow, steady pace
- Make observations with good weather (sunny and warm, no rain and strong wind)
- Submit your data to the eBMS database or to the BMS coordinator

Where to send data?

You can use the eBMS mobile app, [ButterflyCount](#), to record the “15-min Count” or “eBMS Transect”. The application can be installed on [Android](#) or [iOS](#) devices and allows you to count butterflies from anywhere in Europe. Turn on GPS and the app will draw your route while counting butterflies. You will need to create an account on the eBMS website and sign-in on the app to record butterflies with the app.

You can register a transect with the help of the coordinator. More information on the eBMS website: www.butterfly-monitoring.net and www.danmarksdagsommerfugle.dk



Butterfly
Count
App



Swallowtail - *Papilio machaon*

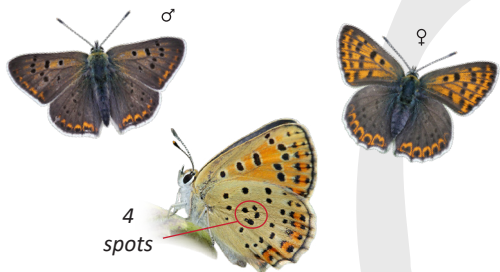




I II III IV V VI VII VIII IX X XI XII



Small Copper
Lycaena phlaeas 

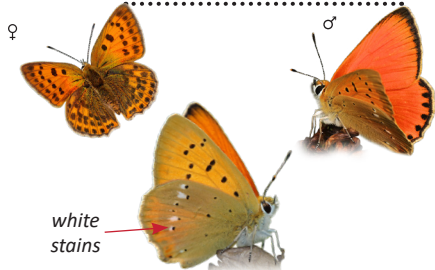
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----




Sooty Copper
Lycaena tityrus   **LFM**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

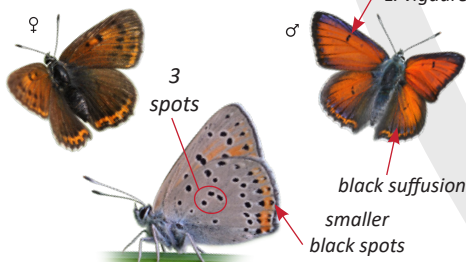
black dot, not present in *L. vigeareae*




Scarce Copper
Lycaena virgaureae 

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

white stains

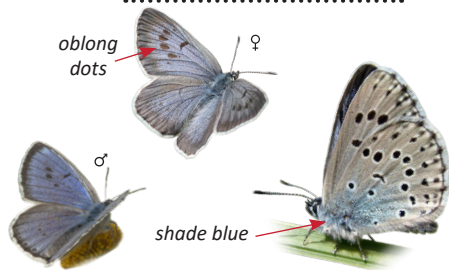




Purple Edged Copper  
Lycaena hippothoe

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

3 spots

black suffusion
smaller black spots

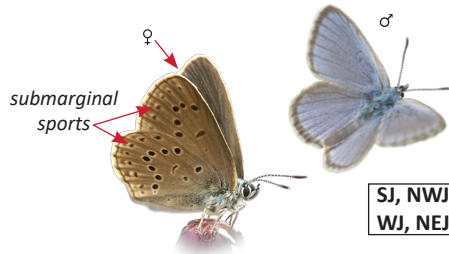




Large Blue
Phengaris arion   **LFM**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

oblong dots

shade blue

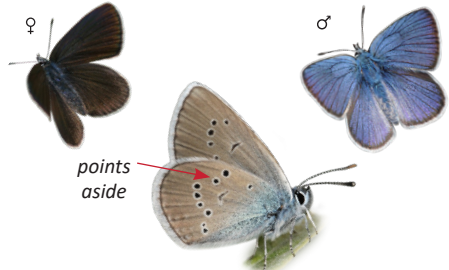




Alcon Blue
Phengaris alcon  

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

submarginal spots

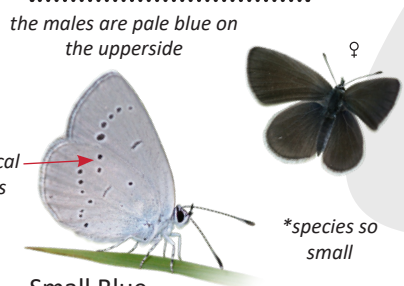
SJ, NWJ
WJ, NEJ




Mazarine Blue
Cyaniris semiargus  

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

points aside

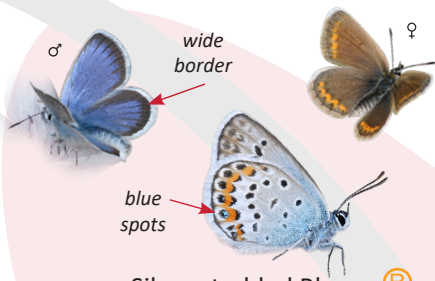


Small Blue
Cupido minimus 

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

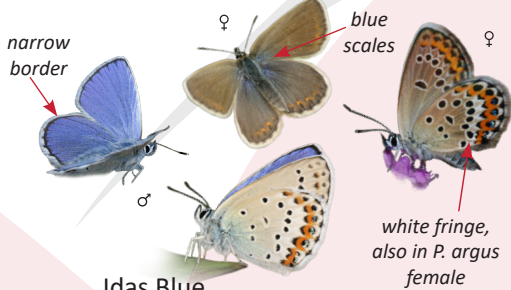
vertical dots

*species so small



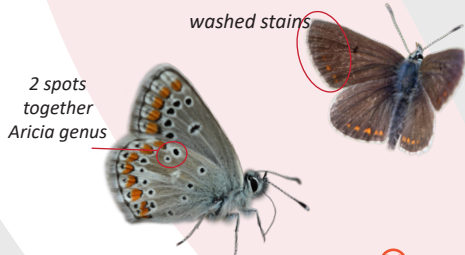
Silver-studded Blue
Plebejus argus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



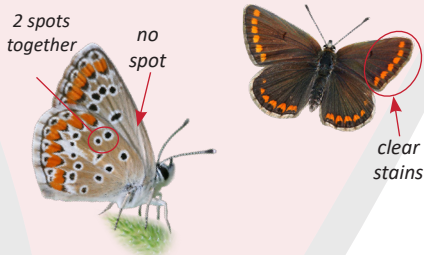
Idas Blue
Plebejus idas

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



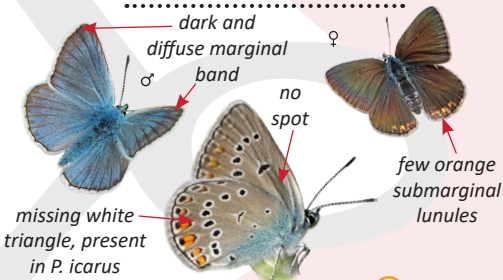
Mountain Argus
Aricia artaxerxes

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



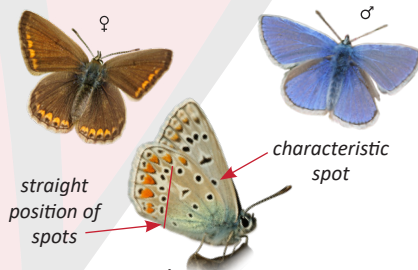
Brown Argus
Aricia agestis

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



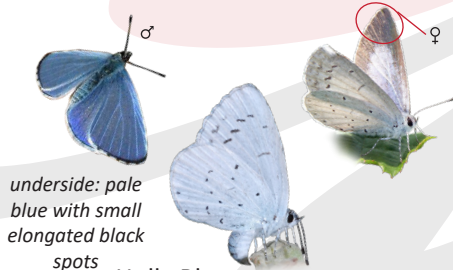
Amanda's Blue
Polyommatus amandus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



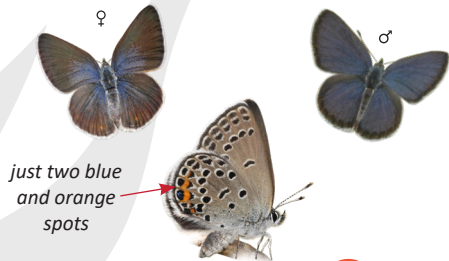
Common Blue
Polyommatus icarus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Holly Blue
Celastrina argiolus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Cranberry Blue
Agrion optilete

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

LYCAENIDAE



Purple Hairstreak
Favonius quercus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

White-letter Hairstreak
Satyrium w-album

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Brown Hairstreak
Thecla betulae

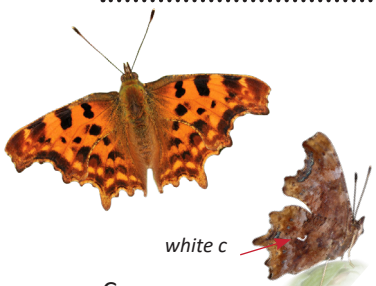
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Green Hairstreak
Callophrys rubi

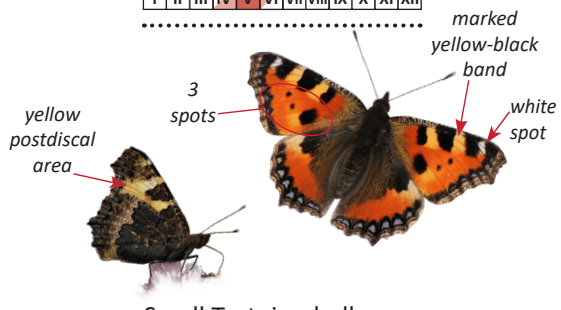
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

NYMPHALIDAE



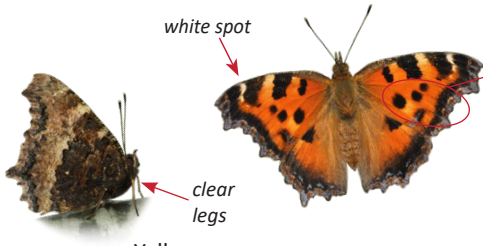
Comma
Polygonia c-album

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



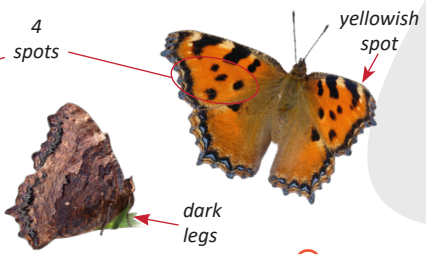
Small Tortoiseshell
Aglais urticae

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Yellow Legged Tortoiseshell
Nymphalis xanthomelas

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Large Tortoiseshell
Nymphalis polychloros

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

blue pupil



dentate white band



Purple Emperor
Apatura iris



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

black dot



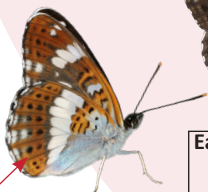
Lesser Purple Emperor



Apatura ilia **NEZ**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

two lines of dots



Eastern distribution
(B, LFM, SZ, NEZ, NWZ, F, EJ)

White Admiral
Limenitis camilla



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

summer generation



spring generation



Map
Araschnia levana



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Peacock
Aglais io



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

eyespot



Painted Lady
Vanessa cardui



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

blue stain



Red Admiral
Vanessa atalanta



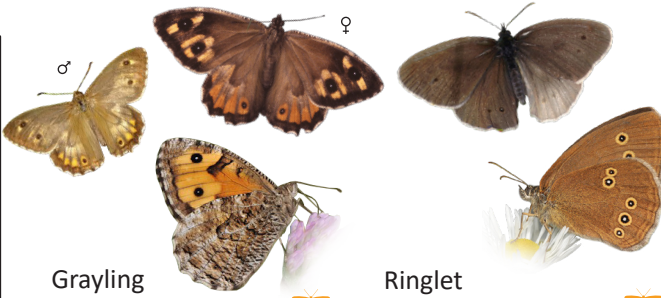
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Camberwell Beauty
Nymphalis antiopa



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

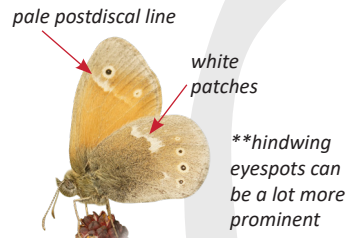


Grayling
Hipparchia semele

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

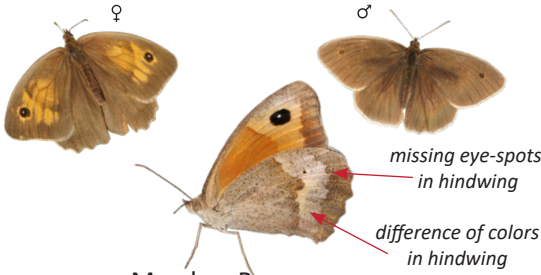
Ringlet
Aphantopus hyperantus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



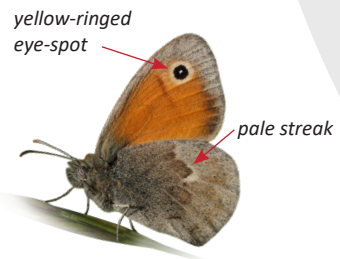
Large Heath
Coenonympha tullia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



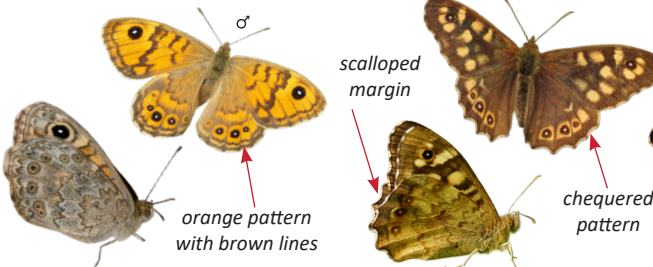
Meadow Brown
Maniola jurtina

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Small Heath
Coenonympha pamphilus

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Wall Brown
Lasiommata megera

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

Speckled Wood
Pararge aegeria

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



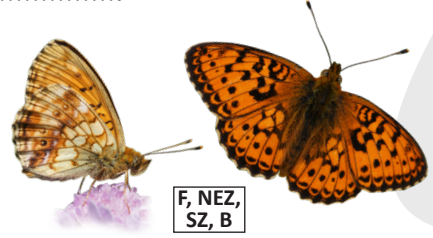
Queen of Spain Fritillary
Issoria lathonia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Marsh Fritillary
Euphydryas aurinia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Lesser Marbled Fritillary
Brenthis ino

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

black dots inside orange cells



Glanville Fritillary
Melitaea cinxia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

darker border lunules



False Heath Fritillary
Melitaea diamina

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Heath Fritillary
Melitaea athalia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

SJ, WJ, EJ, NWJ, NEJ

silvery submarginal spots



Dark Green Fritillary
Speyeria aglaja

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

marked androconia

*spots in underwing can be silvery



High Brown Fritillary
Fabriciana adippe

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

reddish-brown spots



Silver-Washed Fritillary
Argynnis paphia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

green with silver stripes

submarginal spots with brown cap



Niobe Fritillary
Fabriciana niobe

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

brown spots with silvery pupils

no triangular marginal spots



Cranberry Fritillary
Boloria aquilonaris

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

a clear pearly or white spot



Pearl Bordered Fritillary
Boloria euphrosyne

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

NEZ LFM

3 distinct pearly or white spots



Small Pearl Bordered Fritillary
Boloria selene

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

well-defined black mark and along the margin



well-defined black mark



♀ Large White
Pieris brassicae

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

black mark a bit diffuse and not long



pale yellow

♂ Small White
Pieris rapae

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

black mark a bit diffuse and short



green highlighted veins

♂ Green-veined White
Pieris napi

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

black veins marked



♂ Black-veined White
Aporia crataegi

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



green spotted pattern with white spots

♂ Orange-Tip
Anthocharis cardamines

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



Mickey mouse pattern

F, NEZ
SZ, B
LFM

♂ Eastern Bath White
Pontia edusa

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



*lemon yellow



'tail' well developed

♀ Brimstone
Gonepteryx rhamni

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



*vanilla yellow

♀ Clouded Yellow
Colias crocea

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

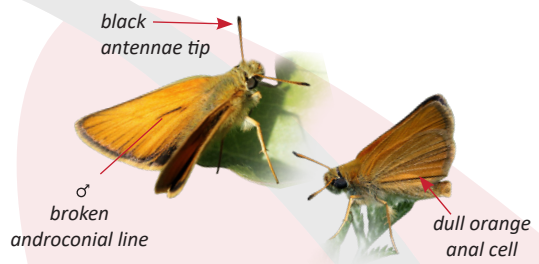


wide band

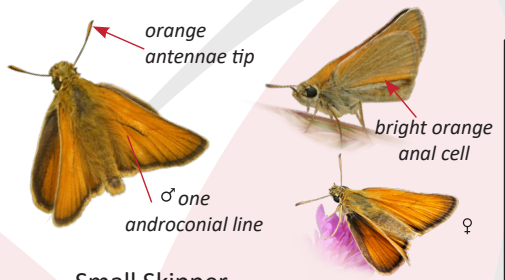


♂ Pale Clouded Yellow
Colias hyale

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----



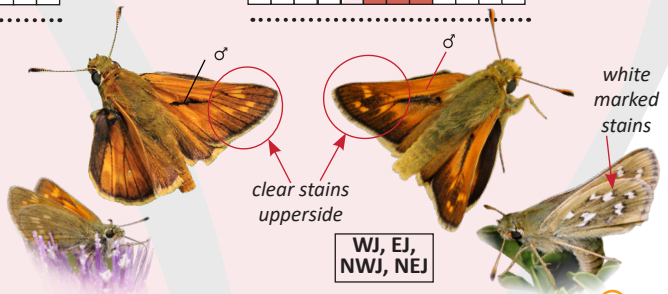
Essex Skipper
Thymelicus lineola
 I II III IV V VI VII VIII IX X XI XII



Small Skipper
Thymelicus sylvestris
 F, SJ, WJ, EJ, NWJ, NEJ
 I II III IV V VI VII VIII IX X XI XII

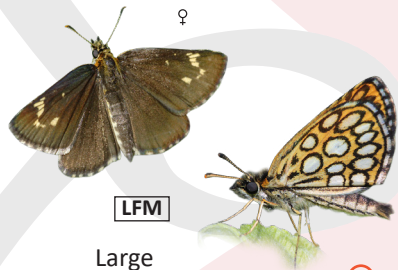


Dingy Skipper
Erynnis tages (R)
 I II III IV V VI VII VIII IX X XI XII

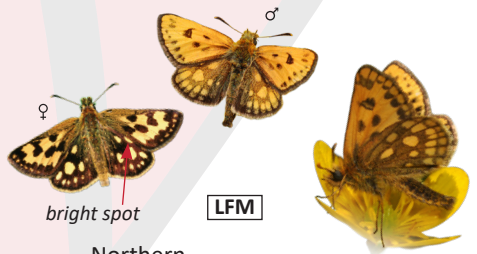


Large Skipper
Ochlodes sylvanus
 WJ, EJ, NWJ, NEJ
 I II III IV V VI VII VIII IX X XI XII

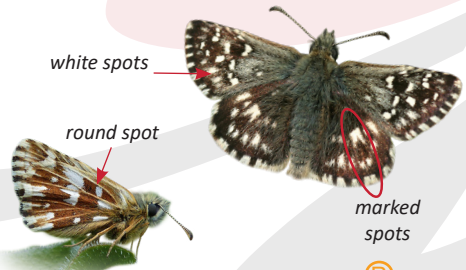
Silver Spotted Skipper (R)
Hesperia comma
 I II III IV V VI VII VIII IX X XI XII



Large Chequered Skipper (V)
Heteropterus morpheus
 I II III IV V VI VII VIII IX X XI XII



Northern Chequered Skipper (V)
Carterocephalus silvicola
 I II III IV V VI VII VIII IX X XI XII



Grizzled Skipper (R)
Pyrgus malvae
 I II III IV V VI VII VIII IX X XI XII



Large Grizzled Skipper (V)
Pyrgus armoricanus
 I II III IV V VI VII VIII IX X XI XII

Butterfly Conservation Europe and the **UK Centre for Ecology and Hydrology** (UKCEH) formed the European Butterfly Monitoring Scheme (eBMS) to bring together data from different Butterfly Monitoring Schemes of Europe. All member countries share their data annually to the eBMS database, to analyse and produce the population trends of the European butterfly species and European Butterfly Indicators, which provide an expert basis for further action in the protection of butterflies and their habitats.

More information about the project can be found at www.butterfly-monitoring.net/

Find more information about the **Danish BMS** on www.danmarksdagsommerfugle.dk

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

www.butterfly-monitoring.net/field-guides

Authors: Anne Eskildsen, Skjold Søndergaard (Naturraad-giverne and Denmark BMS) and Cristina G. Sevilleja (eBMS).



Photography: Paolo Mazzei, Marco Bonifacino, Raniero Panfilo and Daniel Morel (www.leps.it); Sam Ellis, Izabela Dziekańska, Jose Rodrigo Dapena, Martin Wiemers; Luka Šturm, Rudi Verovnik, Barbara Zakšek; Henk Dikkema, Kars Veling, Arthur van Dijk, Bert van Rijs and Chris van Swaay.

Graphic design: Cristina Sevilleja

eBMS - European Butterfly Monitoring Scheme

SPRING - Strengthening Pollinator Recovery through Indicators and monitoring




Argynnis paphia by Svend Rastrup
May 2024

Probability to see a species in Denmark:  Rare  Very Rare

Flight period: months when butterflies are seen. Months shaded darker red: high probability; pale red: lower probability

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

Butterfly size:

 Small  Medium  Large

Sex:

♀ Female ♂ Male

Regional codes:

LFM

Symbols:

→ ○ Specific characteristics to identify the species



UK Centre for Ecology & Hydrology

