



EUROPEAN
BUTTERFLIES
GROUP



eNewsletter

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We are all hoping that 2022 will be a better year for seeing butterflies than 2020 and 2021. My own year has got off to an uneven start. On a birding trip to Extremadura, Spain, in mid-February I was pleased to record no fewer than nine butterfly species flying during sunny periods, including two species of *Euchloe* - **Green-striped White** (*E. belemia*) and **Western Dappled White** (*E. crameri*). However, things went backwards in mid-March when a week in Tenerife co-incided with cold weather and my species count was a measly four, of which just one - **Canary Red Admiral** (*Vanessa vulcania*) - was a Canarian speciality.



Green-striped White (*Euchloe belemia*), Extremadura, 14 February 2022

For obvious reasons this issue has fewer trip reports than usual but there is a good range of other interesting material and I am grateful as ever to contributors. I hope you all enjoy some butterfly success this summer



Canary Red Admiral (*Vanessa vulcania*), Vilaflor, Tenerife, 17 March 2022

and, if you do, please send me a report about it and help me to put together a bumper issue in the autumn!

Nigel Peace, Newsletter Editor, May 2022





Notices and News

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Annual General Meeting 2021

The Annual General Meeting for 2021 was held online on Saturday 19 March 2022. 18 members attended by zoom.

Chairman's report

The Chairman Mike Prentice said that as in the previous year, 2021 had been a difficult year. Membership and subscription income had been relatively unaffected but all proposed and planned activities had been cancelled or postponed. A third visit to northern Spain to survey for **Spanish Greenish Blacktip** (*Euchloe bazae*), a planned survey for **Dil's Grayling** (*Pseudochazara orestes*) in Greece and further work in Romania on **Danube Clouded Yellow** (*Colias myrmidone*) had all been postponed in 2020 and sadly they were also postponed again in 2021.

Membership stood at around 700 members. A long-standing wish to be able offer overseas membership had been postponed because of the pandemic but the way now appeared clear to offer overseas membership very soon. This initiative would increase EBG's ability to liaise with European butterfly enthusiasts and carry out more conservation work.

The Chairman thanked Jude Lock and Mike Haigh for their work on the website and drew attention to the wealth of material to be found there, including

- an identification Guide to the Pyrgus Group of Grizzled Skippers, completed in the last year by Bill Raymond with the assistance of Roger Gibbons.
- copies of all of the Newsletters (except the most recent) together with an index (compiled by Graham Revill) making it easy to track down information from past Newsletters on a particular species or a region.

The annual photographic competition for the calendar had again been very successful. Thanks were due to Anne Spencer, to the judges, and to all those who submitted photographs. As ever the standard of photographs submitted was amazing, and 150 calendars had again been sold.

In 2020 a research bursary had been offered to Juan Pablo Cancela, a Spanish post-graduate student at the University of Azores. Juan Pablo's fieldwork had been interrupted by the pandemic but he did manage to complete his fieldwork in May 2021. The report was available on the website (and is summarised on pages 8 to 12 below).

EBG continued to work very closely with Butterfly Conservation Europe who had completed their ABLE project (ABLE standing for Assessing Butterflies in Europe) and were now working on SPRING, a pollinator initiative. ABLE was a 2-year project encouraging butterfly monitoring across Europe and had kickstarted new monitoring projects as well as supporting some of the long-established schemes. As part of the ABLE project field guides to the butterflies of various areas had been produced including 4 for Italy and one each for Andalusia, Cyprus, and Slovenia. They were available via the News section of the EBG website or from the European Butterfly Monitoring Scheme website (<https://butterfly-monitoring.net/bms-materials>). ▼



Notices and News cont.

All members of the Butterfly Conservation Europe Board and advisers had been asked to help with a project on Madeira. As a consequence the Chairman said that he and Sam Ellis had spent a week there in October walking a number of pre-defined routes conducting 15 minute counts using the new ButterflyCount App looking for Madeiran endemic butterflies. (An account of this trip is on pages 16 to 17 below.).

Planned or proposed activities for 2022 included further work on **Spanish Greenish Black-tip** (*Euchloe bazae*), **Danube Clouded Yellow** (*Colias myrmidone*) in Romania and hopefully on **Dils Grayling** (*Pseudochazara orestes*) in Greece.

Treasurer's report

David Moore, the Hon Treasurer, confirmed that the EBG remained in a healthy financial position with a bank balance in excess of £9,000.

Committee membership

Those Branch Committee members required to stand down by rotation (Dudley Cheesman, Dave Plowman, Nick Greatorex-Davies and Martin Davies) were re-elected. In addition, Sam Ellis, an attendee at EBG meetings as the Butterfly Conservation representative, was elected to join the Committee from the end of May, when he would be retiring from BC.

Talk by Sam Ellis

The formal business was followed by a talk by Sam Ellis (currently the International Director of Butterfly Conservation and Chair of Butterfly Conservation Europe) on promoting international butterfly conservation action. This followed up his piece on Working in Europe in the last Newsletter (EBG 30 p.6-9).

In the course of his talk, Sam made particular mention of the '15-minute count' method of surveying butterflies developed by the European Butterfly Monitoring Scheme (eBMS), and the associated ButterflyCount App. A beauty of the app was that it recorded exact location automatically. The app had worked extremely well in Madeira, where there was a relatively small number of species, and would be tried out in Corfu soon. (The app is described in the recent guide to European butterfly recording and monitoring on the EBG website (<http://www.european-butterflies.org.uk/species.html>), and a full guide can be found at <https://butterfly-monitoring.net/ebms-app>

Nigel Peace, liz-nigel@hotmail.co.uk

2023 EBG Calendar

The annual calendar competition will be run again this autumn. Entries to Anne Spencer (maximum 3 per entrant) by 1 September please, ensuring that the English common name of the butterfly is on each photo caption. Anne's email is rhoslan.anne@gmail.com ▼



News from France Spring 2022

Contributed by Jude Lock (lock.jude@gmail.com)

A comparison of the butterfly community of northern Bergerac, Dordogne, France in the late 19th century and the early 21st century. Paper by David Simpson on EBG website.



The Hermit (*C. briseis*) suffered a dramatic decline in northern and central France during the 20th century which was reflected in the study area where it has become extinct. The loss of dry stony pastures has been critical to this species.

In 1895 Raphael Tarel published a study providing detailed information on the presence, abundance, habitats, localities and flight periods of butterfly species around Bergerac in the Dordogne. Between 2011 and 2021 local resident David Simpson recorded butterflies in the same area as Tarel. Combined with the observations of others, David has been able to draw up a list of 'winners' and 'losers'. The results are presented in a paper which is now available on the EBG website here http://www.european-butterflies.org.uk/downloads/Bergerac%20paper_EBG.pdf

Here are David's conclusions:

Conclusions

The butterfly community around Bergerac has undergone significant changes since first being recorded in detail by Tarel and his colleagues in the late 19th century. The majority of species recorded in the late 19th century remain present in the study area (67) but most appear to be less common today. This is probably the result of habitat loss and degradation.



The Provençal Short-tailed Blue (*Cupido alcetas*) has colonised the area, a southern species seemingly responding to climate warming.

18 species appear to have become extinct. A notable group of species including the **Hermit (*Chazara briseis*)** and **Turquoise Blue (*Polyommatus dorylas*)** are those of dry and often stony grassland generally on limestone. A comparative study of historical and current maps and air photography, as well as observations in the field, suggest that very little or no suitable habitat now remains for these species in the study area. This habitat has been lost due to the extension of forest, building and infrastructure development and modern developments in farming.



The Large Chequered Skipper (*Heteropterus morpheus*) has also colonised the area, though for unknown reasons.

13 species however have colonised the study area since the late 19th century. Southern species, presumably benefitting from climatic warming, include the **Provençal Short-tailed Blue (*Cupido alcetas*)** and **Marbled Fritillary (*Brenthis daphne*)**. A number of wetland or wetland-related species have, perhaps ▼



Notices and News cont.



The Pearly Heath (*Coenonympha arcania*) has brought forward the start of its flight period by two months to May which may be an avoidance of the summer heat and drought caused by climate change.

surprisingly, also colonised the study area by 2011-2021 including the **Large Copper (*Lycaena dispar*)**, **Chequered Skipper (*Carterocephalus palaemon*)**, **Large Chequered Skipper (*Heteropterus morpheus*)** and **Map (*Araschnia levana*)** though for unknown reasons.

Although most forest species seem to have declined, the **Ringlet (*Aphantopus hyperantus*)** has bucked this trend by colonising and may have been assisted by the extension of forest across Dordogne during the 20th century.

Several species' flight periods have been extended, sometimes greatly so, notably later into the autumn but also to a lesser extent earlier in the spring. A few species like **Red Admiral (*Vanessa atalanta*)**, **Peacock (*Aglais io*)** and **Brimstone (*Gonepteryx rhamni*)** were recorded in all months of the year in Dordogne in the period 2011 to 2021, something not recorded in Tarel's day. The **Pearly Heath (*Coenonympha arcania*)** and probably the **Brown Hairstreak (*Thecla betulae*)** have shifted their flight periods, earlier in the former case and later in the latter. Climate warming would seem to be the main factor driving these changes.

Les papillons de Dordogne et départements limitrophes by Philippe Vincenot

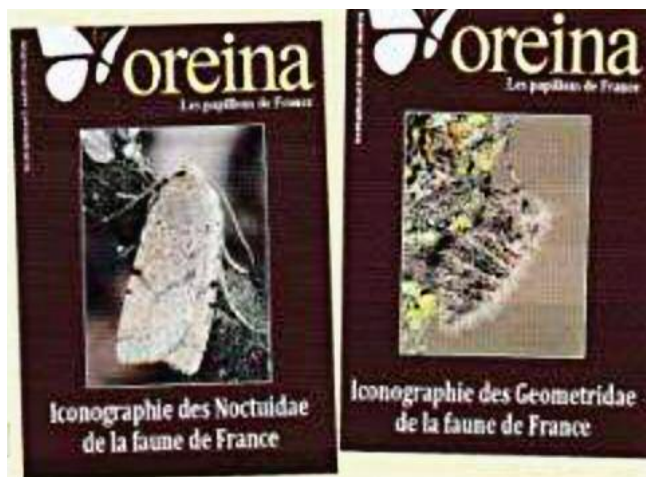
A new guide has recently been published by Philippe Vincenot, a young Dordogne artist and naturalist living in Périgueux. It describes 130 butterfly species (and day flying moths) of the Dordogne, and the surrounding areas.

Produced with the collaboration of L'association Nature en Périgord and Au temps d'Eugénie, published by Edition du machaon, with 250 illustrations. A5 format, 135 pages, price 18€ plus p+p. For more information and to order see here: <https://vincenot-illustrateur.fr/index.php/product/les-papillons-de-dordogne-et-departements-limitrophes/>



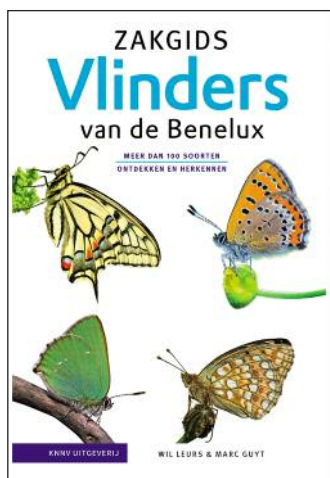
Iconographie des Noctuidae de la faune de France. Published by oreina, les papillons de France, February 2022

The Iconographie des Noctuidae de la faune de France is now available to purchase from oreina, as is a revised and updated edition of the Iconographie des Geometridae de la faune de France, which was published in December 2020.



Both publications are A4 paperbacks and comprise photographs of moths in their natural resting positions. Captions give scientific name, location and date. The Noctuidae volume has 140 pages and 1094 photographs; the Geometridae volume has 120 pages with 902 photographs.

Price 30€ each or 45€ for both publications. Contact: administration@oreina.org to order and for information on postal rates to the UK and Europe.



Zakgids Vlinders van de Benelux. Authors Wil Leurs en Marc Guyt

A pocket guide to the Butterflies of the Benelux, published in February 2022 and produced with the collaboration of De Vlinderstichting and Natuurpunt. The guide describes all species of butterflies for the three Benelux countries. Relevant features that are important for the identification are displayed next to the images; the guide also contains information on habitat, host plants and species distribution. Format 11 x 17cm, 264 pages, price € 17.95

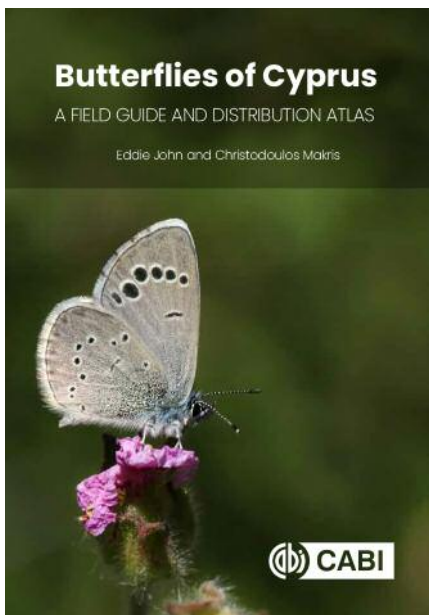
For more information and to order: <https://knnvuitgeverij.nl/artikel/zakgids-vlinders-van-de-benelux.html>

Guide photographique des papillons de jour et zygènes de France, by Jean-Laurent Hentz, Jean-Pierre D'Hondt & Philippe Dauguet. Published by Gard Nature.

This book (see EBG 30 p.4) is now due to be published at the end of April or in May.

Atlas des Papillons de Jour d'Aquitaine, coordinated by Pierre-Yves Gourvil (CEN Aquitaine) & Mathieu Sannier (LPO).

Publication was expected by early 2022 (see EBG 30 p.4-5) but has been further delayed and there is currently no information about the expected publication date.



Cyprus - forthcoming publication

Butterflies Of Cyprus: A Field Guide and Distribution Atlas by Eddie John & Christodoulos Makris

Summarising decades of research and collation of data on distribution, this new book has 15 chapters that include:

- A review of butterfly research in Cyprus since the first documented account by Julius Lederer in 1855.
- Biogeography – the tropical and eremic butterflies of Cyprus.
- Habitats.
- Butterfly behaviour, with an emphasis on migration.
- Phenology – a chart showing data for all 56 species known in Cyprus over the past 100 years.
- Biodiversity and endemics.
- Species accounts, each well illustrated with about six photographs of butterflies and an example or two of hostplants. The text is fully up-to-date to include a detailed account of the newly arrived **Lime/Chequered Swallowtail** (*Papilio demoleus*), with photographs of all early stages of this species. The text is comprehensive and, where relevant, refers to: i) the presence of the species in nearby countries of the eastern Mediterranean; ii) Distribution in Cyprus (each species having a detailed 5 km² map); iii) Phenology, iv) Larval hostplants, v) Ecology and behaviour, vi) Description/identification aids, vii) Similar species and viii) Conservation status in Cyprus.
- Potential species are also discussed, i.e. those species yet to be confirmed for Cyprus. These include **Geranium Bronze** (*Cacyreus marshalli*) and **Mediterranean Skipper** (*Gegenes nostrodamus*), both of which are possibly already present, and other species likely to appear due to range expansion or migration.
- Conservation, monitoring and possible areas for future research.
- References – the book is comprehensively referenced, with over 400+ references to books and scientific papers.

The publication date is summer 2022. Price TBA.

Web page www.cyprusbutterflies.co.uk/page7.html



EBG Support for Research

EBG Research Bursaries

The European Butterflies Group promotes the study of European butterflies by offering annual research bursaries (normally €600) to assist with travel and other expenses.

To apply for a bursary, candidates should submit a short project proposal and an estimate of the overall cost in a maximum of 1000 words and send it by email to info@european-butterflies.org.uk together with the email addresses of two referees. The European Butterflies Group committee will review the applications and select successful applicants.

The bursaries are open to citizens of any country in the Council of Europe. Only projects within Europe (as defined by the Council of Europe) are eligible. Although there is no upper age limit for applicants, the scheme has been drawn up with younger candidates in mind. The objective is to help beneficiaries start or enhance their careers in conservation.

Successful applicants are expected to produce a short report at the end of their project, including details of all butterflies recorded.

The scheme is particularly suited to surveys of rare and threatened species, i.e. those with a Red List classification of NT, VU, or EN and a restricted range.

Further information about the scheme, including an example of a typical application, is on the EBG website at http://www.european-butterflies.org.uk/downloads/EBG_Annual_Research_Bursary.pdf. Also on the website can be found the Red List classification of all European species, by opening the file EuropeanButterflies.xls under the 'Species' tab.

Research into the Butterflies of Sistema Ibérico

In 2020 EBG awarded a bursary to Juan Pablo Cancela, a PhD student from Azores University, to conduct research into the butterflies of the Sistema Ibérico in Spain. Juan Pablo's research trips were interrupted by Covid but he managed to undertake all the fieldwork in 2020 and 2021.

The Sistema Ibérico is a calcareous mountain range in the east of the Iberian Peninsula stretching 500 km from northwest to southeast, separating the depression of the river Ebro from the Iberian central plateau. Oak, pine, and juniper forests are part of the landscape together with agricultural land. Approximately 155 butterfly species occur in the area.

Juan Pablo's objective was to gather distributional information for 13 butterfly species that were classified as Near Threatened (NT) in the European Red List that occur in the Sistema Ibérico, specifically in the Spanish provinces of Guadalajara, Cuenca and Teruel (Table 1). He set 500 metre transects in 30 locations in the three provinces, ▼



and visited the transects on several trips, trying to cover the phenology of the species, from May until July. During 2020, 3 visits were completed in June and July. During 2021, he conducted 2 visits in May to complete coverage of the phenology of the target species.

Scientific name	Common name	Family	Flight period
<i>Erebia epistygne</i>	Spring Ringlet	Nymphalidae	March-May
<i>Pseudophilotes panoptes</i>	Panoptes Blue	Lycaenidae	March-May
<i>Polyommatus nivescens</i>	Mother-of-Pearl Blue	Lycaenidae	April-August
<i>Thymelicus acteon</i>	Lulworth Skipper	Heperiidae	April-July
<i>Iolana debilitata</i>	Iolas Blue	Lycaenidae	April-June
<i>Zegris eupheme</i>	Sooty Orange-tip	Pieridae	April-May
<i>Euphydryas desfontainii</i>	Spanish Fritillary	Nymphalidae	May-June
<i>Phengaris arion</i>	Large Blue	Lycaenidae	May-June
<i>Polyommatus dorylas</i>	Turquoise Blue	Lycaenidae	May-September
<i>Parnassius apollo</i>	Apollo	Papilionidae	June-August
<i>Hipparchia hermione</i>	Rock Grayling	Nymphalidae	June-September
<i>Chazara briseis</i>	Hermit	Nymphalidae	July-August
<i>Polyommatus damon</i>	Damon Blue	Lycaenidae	July-August

Table 1. Near Threatened target species, ordered by flight period

Juan Pablo's report can be viewed on the website - http://www.european-butterflies.org.uk/downloads/JuanPablo_SistemaIbericoReport.pdf. It has sections covering each of the three provinces (Guadalajara, Cuenca and Teruel); that on Teruel is reproduced below, with some adjustments to fit the presentational style of the Newsletter.

Teruel

This province has a very rich fauna and almost all the species of the Sistema Ibérico can be spotted here. 19 of the 30 locations of the study were there, divided in two geographical areas: Sierra de Albarracín to the west, adjacent to the Serranía de Cuenca, and Gúdar Javalambre to the south-east, close to the border with Valencia province.

Sierra de Albarracín

Vegetation ranges from pine forests in Griegos and Nacimiento Rio Tajo, open areas of holm oak in Cella and Villar del Cobo, to dry juniper forests interspersed with pine trees and agricultural areas in Tramacastilla, Monterde de Albarracín, Valdecuenca and Gea de Albarracín. Altitudes in this region ranged from 1000 to 1600m asl.

In Sierra de Albarracín the most abundant species were the nymphalids **Dusky Heath** (*Coenonympha dorus*), **Iberian Marbled White** (*Melanargia lachesis*) and **Gatekeeper** (*Pyronia tithonus*) and the lycaenids **Silver-studded blue** (*Plebejus argus*), **Escher's Blue** (*Polyommatus escheri*) and **Oberthür's Anomalous Blue** (*Polyommatus fabressei*).



Griegos, Monterde de Albarracín and Moscardón hosted high numbers of blue butterflies, concentrating up to eight species in some visits. **Black Satyr** (*Satyrus actaea*) (Cella), **Southern Hermit** (*Chazara priouri*) (Gea de Albarracín), **Chequered Blue** (*Scolitantides orion*), **False Baton Blue** (*Pseudophilotes abencerragus*), and **Spanish Zephyr Blue** (*Kretania hesperica*) (Villar del Cobo) were interesting sightings that appeared in different sites in low numbers.

Nine target species were detected in this region. **Rock Grayling** (*Hipparchia hermione*) was the most abundant among the target species. I recorded very few individuals of **Mother-of-Pearl Blue** (*Polyommatus nivescens*) and **Damon Blue** (*Polyommatus damon*). **Hermit** (*Chazara briseis*) was spotted in Villar del Cobo while **Lulworth Skipper** (*Thymelicus acteon*) was in Griegos and Valdecuenca. In Tramacastilla I spotted around 20 **Iolas Blue** (*Iolana debilitata*) food plants (*Colutea hispanica*) but no adult was detected. Luckily, a close inspection of the fruits (checking the interior of the dry sepals) revealed the presence of several empty eggs per fruit (inside sepals) totalling around 30 in just one plant. In 2021 I detected **Spring Ringlet** (*Erebia epistygne*) in Moscardón. **Panoptes Blue** (*Pseudophilotes panoptes*) was on the other hand more spread along the region with good numbers in Gea de Albarracín. A single **Sooty Orange Tip** (*Zegris eupheme*) detected in Monterde de Albarracín closed the list of near threatened species in the region.



Oberthür's Anomalous Blue (*Polyommatus fabressei*)



Southern Hermit (*Chazara priouri*)



Rock Grayling (*Hipparchia hermione*)



Hermit (*Chazara briseis*), male

Gúdar Javalambre

In Gúdar Javalambre 10 localities were visited from the base of Javalambre mountains (1100m asl) to the summit (Javalambre peak, 2005m). The localities are a representation of the vegetation forms present in the area: river forest, grasslands, pine forest with different densities, Juniperus forest and high mountain habitats. The most abundant species in these transects were **Grayling** (*Hipparchia semele*), **Spanish Marbled White**, **Meadow Fritillary** (*Melitaea parthenoides*), **Southern Mountain Argus** (*Aricia montensis*), **Dusky Meadow Brown** (*Hyponephele lycaon*) and **Silver-studded Blue**, especially in the habitats of pine forest, from 1400 to 1600m. The clearings of the pine forest and the grasslands close to the river Camarena were the most productive habitats for butterflies, recording between 30 and 40 species in some visits. Blues were very diverse in some habitats, recording the presence of **Mazarine Blue** (*Cyaniris semiargus*) and **Amanda's Blue** (*Polyommatus amandus*) among others. **False Grayling** (*Arethusana arethusa*) and **Zapater's Ringlet** (*Erebia zapateri*) together with **Nettle-tree Butterfly** (*Libythea celtis*) were interesting species recorded at the end of July at middle mountain areas.



Zapater's Ringlet (*Erebia zapateri*)



Damon Blue (*Polyommatus damon*)



Apollo (*Parnassius apollo*)



Spring Ringlet (*Erebia epytigne*)



Habitat of **Apollo** (*Parnassius apollo*) and **Spring Ringlet** (*Erebia epistygne*)



Habitat of **Hermit** (*Chazara briseis*)

Ten near threatened species were detected in this region. In this case, all the species showed similar abundancies. **Turquoise Blue** (*Polyommatus dorylas*) was always recorded above 1600m, with preference for pine forest clearings. **Mother-of-Pearl Blue** was spotted once at around 1900m. **Rock Grayling** and **Damon Blue** were recorded at several altitudes and habitats. **Apollo** (*Parnassius apollo*) was usually recorded at altitudes above 1900m although some adults were spotted at 1600m. In contrast, **Lulworth Skipper** was recorded only in the transects in the base of the mountain, without being reported above 1300m, similarly to Hermit. **Spring Ringlet** adults were spotted resting on the rocky matrix present between the limit of the forest and the summit of the mountain. Both **Spanish Fritillary** (*Euphydryas desfontainii*) and **Panoptes Blue** were detected at low altitudes. •

Nigel Peace (editor)

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All photos by Juan Pablo Cancela

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Planning your trip

The Benefits of Research

by Mike Prentice

“Time spent in reconnaissance is seldom wasted “

These words, widely attributed to Field Marshal Erwin Rommel, apply as much to searching for butterflies as they do to warfare. Whether you are taking a few hours out of a family holiday or planning a dedicated butterfly trip, if you have specific target species in mind the key to success lies in planning and research.



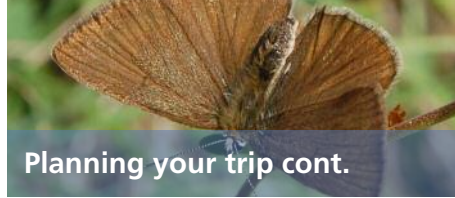
I learnt this the hard way in the years before easy access to the internet was available. I wanted to see **Piedmont Anomalous Blue (*Polyommatus humedasa*)** and I knew that the only place in the world to find it was somewhere near Aosta. Looking for the butterfly without any specific information was like searching for the proverbial needle in the haystack. When I returned a couple of years later with the correct information the task was simple! I then realised that on my previous visit I had been only a mile away from the correct spot, but it might just as well have been a hundred miles!



If you wish to visit a particular area or have specific targets in mind you might choose to go on an organised trip with one of the many natural history holiday companies. Until the pandemic curtailed their activities, EBG maintained a list of holiday companies and their programmes on the website and we may well do so again in the future now that they are restarting their activities. There are obvious advantages of an organised trip - no need to worry about any of the logistical details or language difficulties – but more importantly you are relying upon the experience and expertise of the tour leaders who have done the research and planning for you. This does come at a slight premium as the company wishes to make a profit and the trip needs also to bear the costs of the leader(s) but a well-organised trip gives good bang for your bucks.

Piedmont Anomalous Blue
(*Polyommatus humedasa*)

So if you decide to travel independently how can you find your target species? Certainly the growth of data on the internet has made the task much simpler. There are a number of steps to take to increase your chances of finding your targets. ▼



Identification

First, I would recommend that you know that you can identify what you are looking for! There are numerous field-guides available but the taxonomy has moved on since many were written, so you may need to delve deeper into the literature (for example some sub-species in the Collins guide by Tolman and Lewington now have specific status) or look on the internet. You will find on the Species page of the EBG website the currently accepted list of all European butterfly species. As a great starting point a good source of identification assistance is Matt Rowlings website – <http://www.eurobutterflies.com> where he has photos of most European species and some helpful text.

Location

Next does your target species fly in the locality you are visiting? The LepiDiv project from the Helmholtz Centre for Environmental Research - UFZ in Germany publishes on-line distribution maps for most European species at <https://www.ufz.de/european-butterflies/> and this will give you an indication of butterfly distribution at country scale. However, to precisely locate your target species you will need to use other sources.

Some country monitoring schemes show accurate locations for each species: the Swiss scheme, a link for which can be found on the Switzerland page of the EBG website, contains all Swiss records since 1835 and the Swedish scheme data is available via GBIF (Global Biodiversity Information Facility). However perhaps the easiest route is to use either Observation.org or iNaturalist which contain butterfly (and other taxa) records with GPS localities for all except a very few threatened species where the information is deliberately blurred.

Piedmont Anomalous Blue
Polyommatus humedasa (TOSKI & BALLETTID, 1976)

Data	Number	User	Observations
observations	241	Menno Harman	15
users	83	Pieter Baalbergen	13
photos	146	Guus Jenniskens	10
sounds	0	Jilbert Hijlkema	10
		André Geelhoed	9

The Piedmont anomalous blue (*Polyommatus humedasa*) is a species of butterfly in the family Lycaenidae. It is endemic to Italy, where it is known from the Aosta Valley in the Italian Alps. It is mainly found on altitudes of 800 to 1,000 meters but at times up to 1,600 meters. There is one generation per year with adults on wing from July to August, with a peak in the second half of July. The larvae feed on the flowers of *Onobrychis montana* and *Onobrychis vicifolia*. They are attended to by ants. ^W

Italy - Aynavilles (comuni) (IT)
Martijn de Jong
2014-07-13

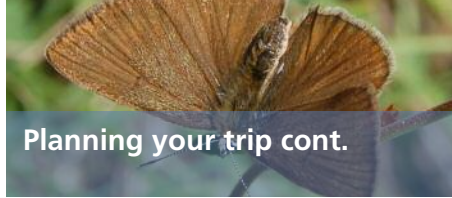
I've seen this species!

Observation.org and iNaturalist

Both <https://observation.org/> and <https://www.inaturalist.org/> allow you to search their databases by species and filtered by time. So, returning to my example of **Piedmont Anomalous Blue**, if you log in to Observation.org, proceed via Explore and Species, and then type the name in the search bar you are taken to the species page where you can click on Observations. This will take you to a list of the most recent observations and if you click on the date of one of the records you will

see a photograph (if there is one) and a map showing the exact locality. Clicking on the map allows you to zoom in and zoom out and establish where to find the butterfly. (There is still a little detective work required on how to reach it as you will not wish to wade across the river and you need to work out that you need to park in Pont d’Ael - also sometimes spelled Pondel – where there is a bridge across the river but Google Earth will help here.)

You can follow a very similar procedure on iNaturalist (although I find the maps ▾



Planning your trip cont.

Piedmont Anomalous Blue
Polyommatus humedasa (TOSI & BAULETTI, 1975)

10 imago present

2021-07-26 11:17
Marc Kolkman
Italy - Aymavilles (comuni) (IT)
Unknown

GPS 45.6854, 7.2200
Accuracy 48m
Source iObs

Details	
Date	2021-07-26 11:17
Number	10
Life stage	imago
Activity	present
Location	Italy - Aymavilles (comuni) (IT)
Observer	Marc Kolkman
Counting method	seen not counted
Method	seen

better on Observation.org and the search is more intuitive but this is really a matter of personal taste). Once you are familiar with these websites you will learn that you can, for example, search by user and look at other observations made by the observer who saw **Piedmont Anomalous Blue** on the same day or on preceding or subsequent days to establish what else may fly in the same area. Familiarising yourself with one of these websites will allow you to explore your target species by year as well as locality so that you can discover flight-times or you could “follow” particular observers.

Flight period

Have you checked the flight times for your target species in the selected area? Some species have only a very short period of appearance as adults and this can vary greatly with latitude and altitude but Observation.org or iNaturalist can

help with this information. Where local flight data is available, such variations may need to be factored into your plans before you book your flights or ferry tickets.

However, flight times can also vary between years and this may even be affected by the weather conditions that prevailed during seasons earlier than that of your visit (e.g. a dry or cold spring) but this is hard to take into account unless you have lots of local contacts who are able to keep abreast of such local conditions. Lastly, you will need luck and some favourable weather conditions while you are there but there is nothing you can do about that (except take a book to read!).

Other sources of information

For the site data, there are numerous other sources of information which may help you. For many of the European countries there is an EBG Country rep (I am the country rep for Italy and receive a number of enquiries from members visiting Italy on holiday), past issues of the Newsletter contain a wealth of information on past trips and Graham Revill has produced a useful index of places and species mentioned (again on the EBG website) and our Committee members have travelled widely and are generally happy to help members with locality information (unless it has been received in confidence). Holiday company tour reports are another source of intelligence although they may not be as specific as Observation.org and iNaturalist.

The internet whilst incredibly useful is no substitute for human contact; try contacting Committee members or people you know who have visited the area and I am always happy to help members with information – contact me at the email below. •

Mike Prentice

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Madeira

A trip to Madeira

by Mike Prentice

We at European Butterflies Group have always worked closely with Butterfly Conservation Europe (BCE); we are invited to all Partner meetings and for the past 8 years have attended all Board meetings. A principal focus for BCE over the past few years has been to encourage the monitoring of butterflies and moths by supporting the existing monitoring schemes and by helping to establish new monitoring schemes in countries where no such scheme existed. The 2-year ABLE project (Assessing Butterflies in Europe) was successful in establishing new national schemes in 10 new countries including Italy, Portugal and Bulgaria, but BCE also support smaller schemes particularly where conservation need is great or where there is a high degree of endemism.

The Madeira project

One such initiative was a project on Madeira. The island has a limited number of butterfly species but with some interesting and threatened endemics and the unfortunate accolade that it is probably Europe's only locality with a butterfly extinction in modern times. No-one has seen the **Madeiran Large White** (*Pieris wollastoni*) since 1986 and one of the aims of the current project is to establish whether it is still in existence.

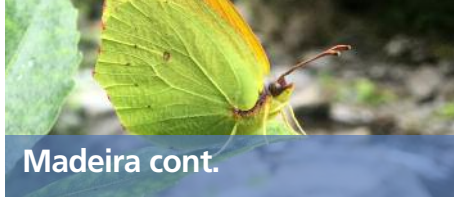
The initial aim of the project was to establish the distribution and abundance of the threatened endemic species - **Madeiran Speckled Wood** (*Pararge xiphia*) and **Madeiran Brimstone** (*Gonepteryx madarensis*), both of which are classified as Endangered - and to search for **Madeiran Large White** (Critically Endangered). Once this phase has been completed, and the data analysed, Species Action Plans will be produced for each species and a monitoring scheme established to be implemented by a combination of volunteers and staff from the main local stakeholder, the Institute of Forests and Nature Conservation (IFCN).

BCE had formed a partnership with Madeiran Flora and Fauna to undertake the project and all BCE Board members and advisers were encouraged to visit Madeira to help with the initial surveys. So during September and October 2021 the partnership completed 41 days of surveys, and, using the eBMS Butterfly Count app, undertook 648 15-minute counts whilst walking 534 km of transect routes. In overall terms over 10,000 individual butterflies from 14 species were recorded.

Our autumn visit

Sam Ellis and I flew to Madeira on 27 September to play our part and in the week that followed we walked over 40 km of transects and undertook nearly 70 15-minute counts.

I have visited Madeira before and knew that the easiest place to see **Madeiran Brimstone** was at Ribeiro Frio and so, having picked up our hire car, Sam and I drove directly there to try and see the butterfly on our first afternoon! Although we had a brief glimpse of this rare species it quickly flew behind a tree and vanished from sight. We did however take the opportunity to look at the butterfly's food plant *Rhamnus glandulosa* (a Macaronesian endemic) as there was a large example by the river and a small sapling which had been planted next to the wall of the local bar. Over the course of the week we revisited ▼



Madeira cont.

Ribeiro Frio (and the bar) several times and saw the Brimstone on 2 or 3 occasions.



Madeiran Brimstone (*Gonepteryx madarensis*) – photo by Chris van Swaay



Madeiran Speckled Wood (*Pararge xiphia*) – photo by Sam Ellis



Madeiran Grayling (*Hipparchia madarensis*) – photo by Sam Ellis

Most of our week was spent on the north side of the island in the laurel forests which is generally where the **Madeiran Brimstone** is found. We not only noted occurrence of the butterfly but also the locations of any *Rhamnus* trees although they are quite difficult to spot in the forest amongst the various species of laurel and are generally found by water-courses.

Survey results

We saw plenty of **Madeiran Speckled Wood** which were recorded on 80% of the survey routes with over 2000 individuals recorded. “Our” **Speckled Wood (*Pararge aegeria*)** is a relatively recent colonist of Madeira and it was recorded on more than 85% of the survey routes. There is no doubt that *aegeria* has spread widely and has prospered since it arrived but I was heartened to see the numbers of *xiphia* on our walks. There were no records of **Madeiran Large White** and it seems inevitable that this species is now extinct. The **Madeiran Brimstone** was only recorded on 33% of the transects with 117 individuals recorded.

Our week on the island was spent undertaking our pre-defined walks using the eBMS app and recording all of the butterfly species we saw. On some of these walks we were accompanied by Sergio Teixeira of Madeira Flora and Fauna and on one day we were accompanied by two local volunteers who are likely to be involved in future monitoring.

Other butterflies

Madeira is a beautiful island with dramatic landscapes. Sam and I stayed in Funchal but as most of our walks were in the north of the island this entailed us either driving around the coast or over the main ridge of the island so we had a chance to see most of the types of habitat. In addition to the endemics we were counting we also saw the endemic **Madeiran Grayling (*Hipparchia madarensis*)** as well as the **Canary Red Admiral (*Vanessa vulcania*)**.

In conclusion

Having had my butterfly activities so severely curtailed over the past 2 years our trip was a fantastic opportunity to get back in the field again. Madeira has a small number of butterfly species but the endemics are well worth seeing and *xiphia* is a spectacular species.

The project has thus far been a great success with many more survey routes walked than originally anticipated and I am pleased to have played a small part in the efforts.

More information on the project and a Field Guide to the Butterflies of Madeira is available on the BCE website: <https://www.vlinderstichting.nl/butterfly-conservation-europe/projects/butterflies-madeira-life4best> •

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Lime Swallowtail in Cyprus

Arrival and possible establishment of *Papilio demoleus demoleus* Linnaeus, 1758 (Lime Swallowtail) in Cyprus

by Eddie John

With the invaluable help of colleagues from Turkey, Syria and more recently Cyprus, we have been monitoring the progress (= 'invasion') of the Indo-Australian papilionid *Papilio demoleus* (Lime Swallowtail) (Fig. 1) in the Middle East and the eastern Mediterranean. By means of molecular analysis the subspecies recently to arrive in Cyprus has been revealed as nominotypical *Papilio demoleus demoleus* and shown to be identical to that of specimens investigated from Mediterranean Syria (John *et al.*, 2021a; John *et al.*, 2021b; John *et al.*, 2022, John & Makris, 2022).

A brief summary of observations follows. ▼

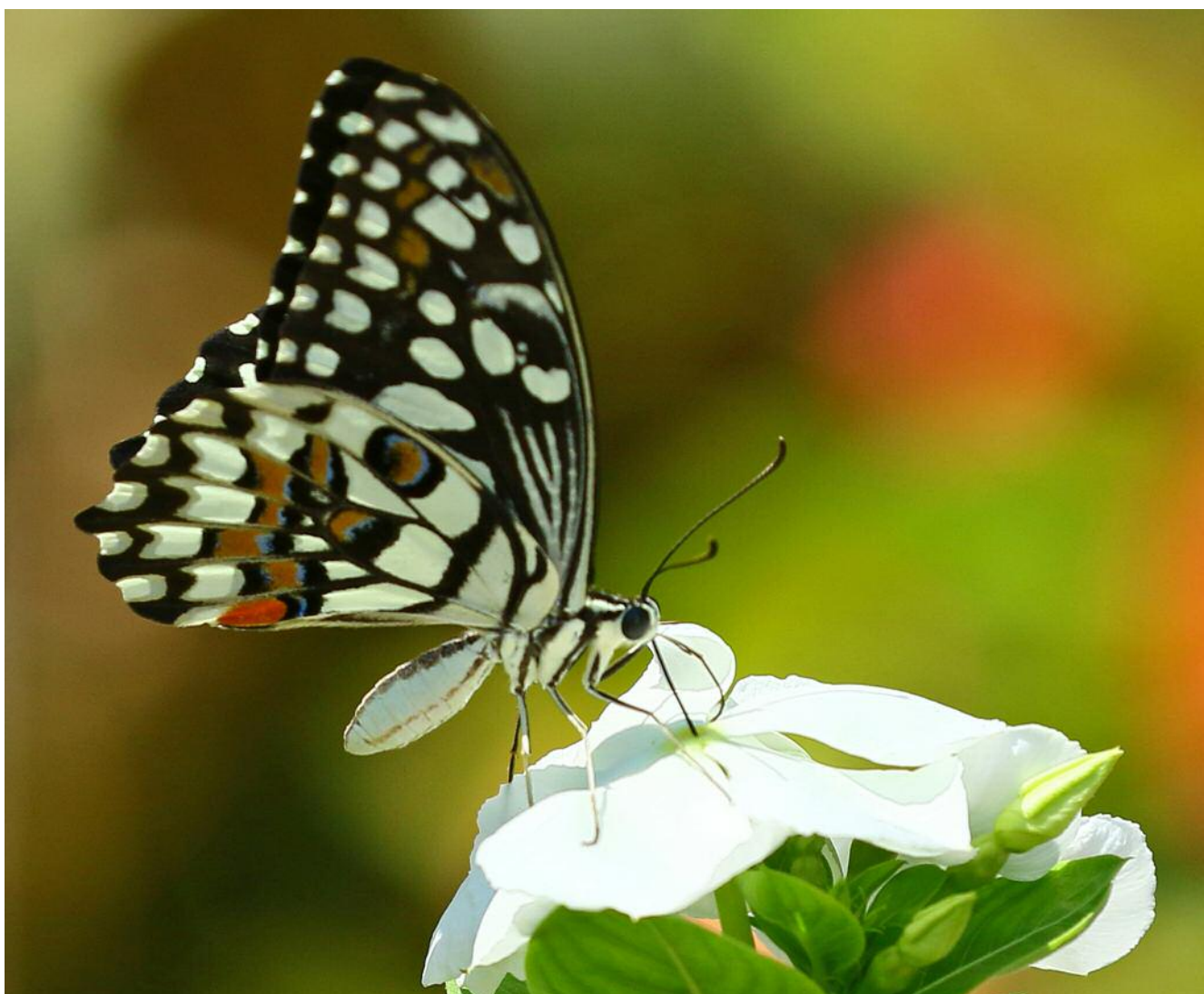


Fig. 1: The spectacular *Papilio demoleus* nectaring on *Catharanthus roseus*, Lysi, Cyprus, 12 August 2021.
Photo: Hasan Bağlar



Fig. 2: *Papilio demoleus* male, Nusaybin, Turkey, 2 November 2017. Photo: Onat Başbay



Fig. 3: *Papilio demoleus* female, Mashqita, Latakia Governate, Syria, 5 April 2021. Photo: Mudar Salimeh

Spread of P. demoleus in the Middle East

Since first being reported from inland Syria in 2003 and 2004 (Benyamini et al., 2007), *P. demoleus* was next reported in late August 2005 from Nusaybin, a village in Mardin Province, south-eastern Turkey, bordering Syria (Koçak, Kemal & Akdeniz, 2006). It is reasoned that dispersal took place from the Gulf States (where *P. demoleus* has long been established), via irrigated areas along the Tigris and Euphrates Rivers where the papilionid is likely to have used *Citrus* species grown domestically. This has been the experience in south-eastern Turkey, another area in which *Citrus* is not grown commercially and from which there has been dispersal east and west – again with urban *Citrus* providing a more than adequate source of larval foodplant to sustain establishment of local populations (Fig. 2 this article; Kesran, 2016; Başbay, Salimeh & John, 2020).

First appearances in Mediterranean Turkey and Syria

In the autumn of 2018, *P. demoleus* was reported from two locations in Hatay Province, Mediterranean Turkey (Atay & Tatlı, 2019). In June of the following year, its presence was confirmed in Mediterranean Syria, when Mudar Salimeh found the species in Latakia Governate. By the end of 2019, reports of the species' presence had been received from 11 locations ranging from north to south of Mediterranean Syria. *P. demoleus* appears to have established successfully in these Mediterranean regions of Turkey and Syria, with further observations reported in 2020 and 2021 (Fig. 3; see also Başbay, Salimeh & John, 2020).

Cyprus, 2021

John et al. (2021a) reported on further dispersal into Lebanon, in which year the anticipated arrival into Cyprus also became a reality. As in other regions of the eastern Mediterranean, presence in Cyprus is considered to be due to migration/dispersal, rather than by accidental introduction on imported *Citrus* stock infested with early stages. This hypothesis is supported by several factors, not least being the rapid invasion of the species into nearby territories to the east, the species' known ability to cross expanses of water (Braby, 2016) and the results of molecular analysis that established the Cyprus *demoleus* as being identical to that of Syrian specimens (John et al., 2022). This work confirmed the subspecies to be that ▼



of *P. demoleus demoleus* rather than *P. demoleus malayanus* Wallace, 1865 (as in the Caribbean and Portugal), where the latter ssp. is considered an accidental introduction (e.g. Eastwood, Boyce & Farrell, 2006; Morgun & Wiemers, 2012).

P. demoleus is known to migrate in small numbers (John *et al.*, 2021a) explaining why, as elsewhere in the wider region, no active migration has been evident in Cyprus. *P. demoleus* first appeared – or at least, was first noted – on 11 August 2021 in a garden in Lysi, a village in a non-citrus-growing region of the arid Mesaoria Plain, but with a variety of *Citrus* spp. grown domestically, as is typically found in villages throughout Cyprus (John *et al.*, 2021b). Fortuitously, the observer (Feriha Bağlar) is mother to one of Cyprus' well known butterfly photographers (see Fig. 1) and recognized the significance of her discovery.

Since then, the species has dispersed in subsequent months to five other (known) locations, the most distant ca. 28 km from Lysi (see distribution map in John *et al.*, 2022; John & Makris, 2022). Breeding has been confirmed on five species of *Citrus* at two village locations, but is likely to have been far more widespread, as detection of pre-imaginal stages is difficult for those lacking such experience. Adults were observed on the wing in each of the months from August to early November, with such timing allowing the completion of two broods; *P. demoleus* remained on the wing in Cyprus until at least 5 November.

Likelihood of overwintering success?

The species' persistence in nearby areas of Turkey and Syria in recent years indicates successful colonization and hence winter survival in those largely coastal regions. Similar success is expected for Cyprus, which, if realised, would suggest that the anticipated five broods per year would see *P. demoleus* disperse throughout the entire island during 2022. Details of any observations would be welcomed, please.

Acknowledgements

Hasan Bağlar (Cyprus), Onat Başbay (Turkey) and Mudar Salimeh (Syria) are thanked for allowing use of their excellent photographs and Martin Wiemers (Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany) very kindly organized the molecular work on specimens of *P. demoleus* from Syria and Cyprus.

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Editor's note. Thanks are due to Eddie John for submitting this article and on this occasion I have published it as submitted rather than adapt it to the usual less academic style of the Newsletter. •



Corfu



Corfu Butterfly Conservation – How do you start to conserve eastern Mediterranean habitats for butterflies?

by Dan Danahar

Butterfly abundance, species richness and diversity

These days seeing clouds of butterflies is not a particularly common phenomenon. It's true that I have driven through clouds of migratory *Libythea* butterflies in West Africa, so dense that their squashed bodies covered the grill of our minibus. Furthermore, I've watched clouds of **Painted Ladies** (*Vanessa cardui*) in the Peloponnese, Greece, when this species has also been on mass migration, through the passes close to Mt Chelmos.

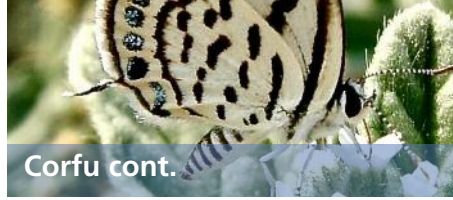
However, in Corfu - Kerkyra, the clouds of **Balkan Marbled Whites** (*Melanargia larissa*) have not been migrating, but they have been superabundant in the mountainous regions on the north of the island. **Meadow Browns** (*Maniola jurtina*) too have been seen in their millions. Simply put, butterflies in Corfu are common and it is this superabundance and high species richness (75+ species known at the present time) that originally attracted my attention to the butterfly fauna of this island, way back in 1976 (I'm now on my 20th visit). In fact, the number of butterflies found on Corfu is an order of magnitude greater per sq km (0.13) than they are in my home county of Sussex (0.012), which has an area 6.43 times larger than Corfu.



Balkan Marbled White (*Melanargia larissa*)



Plain Tiger (*Danaus chrysippus*)



Why so many butterflies on Corfu?

Therefore, the question must be, “why are there so many butterflies here?” Well, we know that Corfu’s geographical location favours higher annual temperatures than the UK but there is also significantly higher rainfall here than there is in many other parts of the Mediterranean. Both these factors lead to good growing conditions for butterfly hostplants and so this helps explain the high abundance of butterflies, but what about species richness? Once again, I think we must look to the island’s geographical location because it sits at the junction between Europe, Asia and north Africa. Each of these continents must contribute species to the island’s butterfly assemblage (for example Corfu is on a regular migration route for the **Painted Lady** (*Vanessa cardui*) and the **Plain Tiger** (*Danaus chrysippus*) from Africa). Consequently, Corfu demonstrates a remarkably high species diversity considering the size of the island.

In contrast, the UK has other more intense anthropogenic factors that tend to diminish our butterfly communities. In fact, according to recent estimates, the UK retains only 53% of its original biodiversity, whereas the global average is closer to 75%. Hence, I suspect that the species diversity of butterflies in Corfu is also high because so much habitat remains intact. It’s true that we have anecdotal evidence that pollinator numbers decline when locals spray their Olive groves with insecticides and there are examples of local habitat loss through development that leads to decreases in butterfly abundances. However, recently insecticide loads have been reduced and indeed spraying by aircraft no longer takes place. So, for the most part, habitat quality remains good and broadly speaking butterfly species diversity remains high.

The need for a baseline assessment

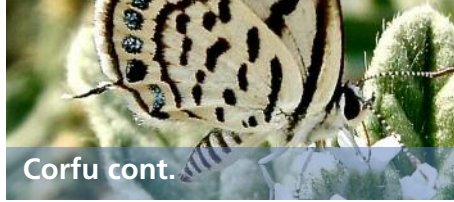
So, you may wonder why there is a need for Corfu Butterfly Conservation? This is a question I answer (in part) in this summer’s edition of BC’s Butterfly magazine. But in short, I believe that we need to establish a baseline assessment from which we can make future comparisons. This is why Corfu Butterfly Conservation initiated the Corfu Butterfly Survey on the 1 January 2021 and to date we have 69 registered recorders and 17,050 butterflies have been sighted. Our goal is to stimulate informed interest and produce robust scientific data that can be used to influence policy and protect habitat for the benefit of Corfu’s butterflies and the wider natural environment on which we all depend.

Conservation Management

Ultimately, our objective is to produce the first comprehensive Corfiot Butterfly Atlas at some point close to 2025-26. In the atlas we intend to make recommendations for the conservation of different butterfly species and so it becomes pertinent to consider this whilst undertaking our field surveys, where observations and conjecture can work together. Whilst there are some similarities between the management practices that are conducted in Corfu and northern Europe (i.e., coppicing/pollarding), in other practices this is not the case (i.e., the use of burning). Early thoughts on human land use that may influence butterfly populations today include the following:

Management of Woodland

The deciduous Valonia Oak (*Quercus macrolepis*) forests and to a lesser extent, a variety of some pine species form the authentic fragments of original woodland remaining on the island. To date we have yet to explore these regions. ▼



Corfu cont.

However, the Olive (*Olea europaea*) in combination with the tall Mediterranean Cypress (*Cupressus sempervirens*) make up the quintessential elements of the contemporary Corfiot landscape. These are the trees that inspired Edward Lear to paint and draw so much of the historic Corfiot countryside. It was the Venetians

A recently-managed Olive grove



who from 1401 until 1797 incentivised the Corfiots to plant Olives widely and now its fruits and oil are a major crop, along with the wood that is sold to fire so many pizza ovens in Italy. Four hundred years is a very long time to work with a crop and so the Corfiots have become familiar with the process of managing their Olive trees, in a way that can easily look like butchery to our untrained eyes. However, what they essentially do is to periodically pollard their trees, and this leads to similar successional processes to those that we are familiar with in the English woodlands of the southeast.



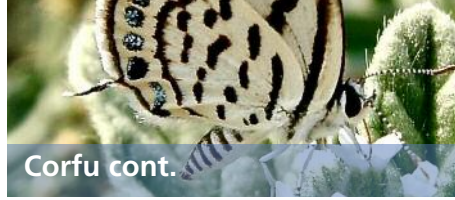
The coppiced Sweet Chestnut managed in commercial Sussex woodlands, like Rewel Wood, creates early successional conditions for violet regrowth on the woodland floor that allow the **Pearl-bordered Fritillary** (*Boloria euphrosyne*) to colonise these newly-managed compartments. In contrast, when the Corfiot Olive groves are managed in a similar way, they support not just the one but a host of butterfly species, such as the **Green Hairstreak** (*Callophrys rubi*), **Wood White** (*Leptidea sinapis*), **Glanville Fritillary** (*Melitaea cinxia*) and **Southern Festoon** (*Zerynthia polyxena*). Of course, all these species benefit from the extensive and abundant habitat because Olive groves are so widespread (some sources estimate that there between 3 to 4 million Olive trees on the island). This allows functional metapopulation dynamic processes to easily take place across the Corfiot landscape.

Green Hairstreak
(*Callophrys rubi*)

Management by Fire

When undisturbed by cultivation, maquis can become the major natural vegetation type in Corfu. Back in the early 2000s I spent time with Oliver Rackham when we took some Cambridge undergraduates to study the flora of Portugal. Oliver made it abundantly clear that fire in the maquis and garrigue of the Mediterranean was an essential component which impacted greatly on the ecology of species that lived within these habitats. In fact, these plants have evolved to burn, with many of the different species being laden with essential oils, allowing flash fires to take place easily, essentially resetting the successional clock.

In Corfu I was reminded of this when Corfu Butterfly Conservation led a joint field meeting with the 'Save Erimitis' campaign, in August 2020. Whilst we walked our group of 30 individuals through the maquis, arsonists set fire to the site at five ▼



different locations. Fortunately, we were rescued by some quick-thinking local fishermen. Such reckless action took place because this stunning natural coastal environment was at the centre of a heated dispute over its potential development and has now been built on, despite its obvious biodiversity value. Since this date, some undeveloped parts of the site have started to regenerate, in some places forming a monoculture of Jerusalem Thorn or Christ's Thorn (*Paliurus spina-christi*). This shrub is the sole hostplant of the **Little Tiger Blue** (*Tarucus balkanicus*).

This century, I am the sole individual to find this species on Corfu, where I photographed and filmed approximately 8 individuals, courting and nectaring on a small plant of a *Heliotropium sp.*, on Kalami beach on the 24 August 2007. Prior to this few other records have been made, for example, Baldock & Bretherton reported one female in fair condition from Kaminaki, on 22nd August 1980. In both cases, the butterfly was seen on the north-eastern coast of the island, which at its nearest point is just 2.7km from Albania, where the species can be locally common. It seems very likely that the individuals we saw were migrants from the mainland.



Erimitis burns

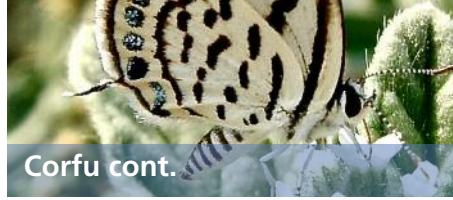


Christ's Thorn (*Paliurus spina-christi*) regeneration



Little Tiger Blue (*Tarucus balkanicus*)

Since that time Chris Little and Max Anderson have both searched this area intensively but have not been successful in relocating the species. For obvious reasons, the Corfiots are very concerned about fire. In recent years climate change appears to have increased the occurrence of wildfires and so very real efforts are made to stop the likelihood of wildfires occurring on the island. However, the appearance of so much Christ's Thorn after the Erimitis burn raises the question, "does the Christ's Thorn and therefore the Little Tiger Blue require fire to maintain their populations?" Certainly, every year Corfiots can see the underpopulated Albanian hillsides burn and so conditions may prevail there which could support this butterfly species (which as I have said is known to be locally common on the Albanian mainland). Either way, we will be keeping a keen eye on those recently burnt areas of Erimitis that now host extensive stands of Christ's Thorn. ▼



Corfu cont.

Management of Ancient Pastures

In recent times, our only records for the **Mazarine Blue** (*Cyaniris semiargus*) come from the old pastures found in the Corfiot uplands. The question this raises is, “Why is this species so restricted in Corfu?”

These small, grazed meadows characteristically have species-poor, relatively short swards, with desire lines produced by livestock to minimize the energy they expend when moving from one meadow to the next. The edges of these dry paths are with

Pockets of ancient pasture



little doubt far warmer than the adjacent sward, and it is on the flowers of the Clover that grow over the edges of the desire lines that we expect oviposition by the Mazarine Blue to take place. To keep these habitats in this condition must require regular grazing. Where such land practices still take place, it is probable that the land can't be used for much else and so consequently, it is agricultural economic factors that maintain the small populations of the Mazarine Blue.

Given that grazing is rarely practiced in the lowlands of the island, populations of Mazarine Blues are no longer found there. Therefore, our work is already beginning to identify areas that might influence regional government to create policy or write legislation to protect local species.

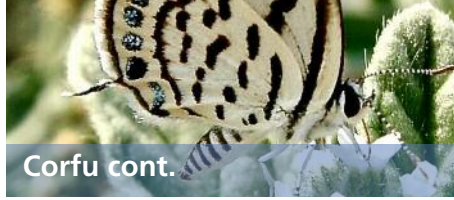


Coastal Development and the Management of Brownfield Sites

Every autumn in Corfu brownfield sites produce a second flush of wildflowers, frequently dominated by the **Aromatic Inula** (*Dittrichia viscosa*). Visitor to these blooms include the **Swallow-tail** (*Papilio machaon*), **Pygmy Skipper** (*Gegenes pumilio*), **Large Skipper** (*Ochlodes sylvanus*), **Clouded Yellow** (*Colias croceus*), **Eastern Bath White** (*Pontia edusa*), **Large White** (*Pieris brassicae*), **Small White** (*Pieris rapae*), **Small Copper** (*Pieris rapae*), **Long-tailed Blue** (*Lampides boeticus*), **Holly Blue** (*Celastrina argiolus*), **Lang's Short-tailed Blue** (*Leptotes pirithous*), **Silver-washed Fritillary** (*Argynnis paphia*), **Painted Lady** (*Vanessa cardui*), **Red Admiral** (*Vanessa atalanta*), **Plain Tiger** (*Danaus chrysippus*) and the **Wall Brown** (*Lasiommata megera*), amongst others. Such habitat is commonly located close to developments associated with tourism, especially along the coast, where disturbance of the seed bank leads to the growth of a variety of different wildflower species.

Mazarine Blue
(*Cyaniris semiargus*)

However, such habitat is frequently short-lived. For example, in Paleokastritsa there is a monastery traditionally visited by many thousands of tourists every year. In 2020 the owners of a free car park decided that they would charge visitors to park at the location and this encouraged other local landowners to create more parking on brownfield sites, destroying the existing wildflower patches. In 2021 the only ▼



remaining patch of this habitat in the area was identified as the only location for a newly confirmed species of butterfly on the island: the **Mediterranean Skipper** (*Gegenes nostradamus*). Whilst it's entirely possible that the Mediterranean Skipper is to be found in other locations on the island, this is currently the only location from which we have been able to record it. So, whilst it is disturbance by humans which frequently create this habitat, as more development takes place along the coast, ultimately the potential for newly-disturbed ground is reduced and with it the chance for creating more pollinator's habitat.

Lost habitat of Paleokastritsa



Summary

As can be seen, our thoughts about the ecology and conservation of butterflies in Corfu are very much in their infancy. The reflections on the Little Tiger Blue and the Mazarine Blue are purely speculative, but such speculation forms a starting point for considering the future not only of Corfu's butterflies but also for its entire natural heritage. At the very least we have begun to identify some vulnerable species, their habitats and we are thinking about the mechanisms which may influence the populations of these butterflies.



In the last sixty years, people in Corfu have redirected their focus from working the land to one which has capitalised on the potential for making a more prosperous living through tourism. This has led to a reduction in many traditional practices such as grazing, which is now reducing in its influence annually. Indeed, the island did at one point support wild deer and so there is now an argument for reintroducing them, as a form of 'rewilding tool', that may also reduce the risk of catastrophic wildfires. Furthermore, the standard tourist model mostly neglects the potential for ecotourism and so the Corfiots are yet to capitalise on their remarkable natural heritage and consequently may not yet fully understand its value.

As an embryonic organisation, Corfu Butterfly Conservation intends to promote discussion about these issues and in the long term make some lasting contribution to the Corfiot culture.

Mediterranean Skipper (*Gegenes nostradamus*)

Currently, we have regular visits from UK butterfly enthusiasts who contribute to our recording scheme. If you would like to participate in such a trip or feel you can contribute to our project in other ways, we would like to hear from you. However, more importantly, if you travel to Corfu and make butterfly sightings whilst there, please record them on our website: <https://www.corfubutterflyconservation.org/>

Finally, I would like to say a special thank you to the trustees of the **Percy Sladen Memorial Fund**, administered by the **Linnean Society of London** and colleagues at **Butterfly Conservation** for their support. •

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