



# **NEWSLETTER**

**Issue 13**

**May 2013**

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## Editorial

Tristan Lafranchis on the cover of 'Butterflies of Europe new field guide and key' has a caption that reads 'Identifying Butterflies is Easy'. I am not sure he is right. If you have been doing it in France since childhood then it might appear easy but for ordinary UK mortals, who at home have only 59 species to choose from, then it is not easy. When we venture outside the UK we find it quite difficult. One reason that butterfly watching is popular in the UK is because it is fairly easy. With sufficient motivation you get there pretty quickly. I do a transect in the UK with both Pearl-bordered Fritillary (*Boloria euphrosyne*) and Small Pearl-bordered Fritillary (*Boloria selene*) on the site. With a bit of practice you can do it. Early in the season, the Pearl-bordered Fritillary are more orange in flight and you can easily pick out the single central silver marking on the hindwing underside if they settle. Later, the Small Pearl-bordered Fritillary are blacker and the hind wing underside has more whiter markings. I have had Small Pearl-bordered Fritillary on the last day of April so you need to get your eye in as to the season. I carry a net to check if I have any doubt. Small White (*Pieris rapae*) and Green-veined White (*Pieris napi*) also need care and sometimes a net.

When I encounter a *Pyrgus* in the Alps, I need Tristan's key and a bum shaped rock to sit on. The *Pyrgus* needs to be in a pot. Even then on my own, I sometimes let them go without coming to a view. Working in the field with other people is a huge help as 3 independent people coming to the same view is much more convincing and reinforces the learning process. That is partly what the EIG is all about. I am also delighted that Roger Gibbons has devoted a huge amount of time in trying to improve our skills to make it easier. His article on *Pyrgus* on page 27, which is mainly links to his website and lots of excellent photos, should help a lot. He also needs some feedback. Likewise, Tim Cowles article on *Colias hyale* (Pale Clouded Yellow) and *Colias alphacariensis* (Berger's Clouded Yellow) Pages 17-27 takes us a long way to recognizing that to chase and catch them in the field is probably a waste of time. They are best recorded as a species pair.

It is not only *Pyrgus* that are difficult, the *Mellicta* fritillaries often need genitalia examination for certainty and most of us have thought long and hard about *Plebejus idas* and *argus* (Idas blue and Silver Studded Blue) and failed to notice that some of the *Cupido argiades* (Short-tailed Blue) are actually *Cupido alceas* (Provençal Short-tailed Blue) or the other way round. I think it is sensible to recognise our limitations and if there is one message I want to emphasise, it is that to learn properly and quickly you need to do it as a group activity. Key it out and then get it checked. Come to a view independently and discuss it. That way you recognize your mistakes.

The transect method developed in the UK by Pollard and Yates has the huge advantage of giving quantitative data which, if repeated over a period of time, can enable long term trends to be established despite inter year variance. It is very reasonable that we wish to get others to adopt this methodology so that we can show alarming graphs to the public and politicians as to butterfly declines in Europe where the relevant decisions are often made and not just in the UK. Sue Collins who works on policy for BCE finds the European Grassland Butterfly Indicator very useful. However, I suspect that many fledgling butterfly organisations in Europe find transects a complete nightmare. So many species cannot be separated accurately in flight and in a situation of very high butterfly abundance, as well as diversity, any transect walker is going to get a bad headache before he has gone many yards. Now I have done transects like this in the UK. On one site where *Argynnis adippe*, *aglaja* and *paphia* (High Brown, Dark Green and Silver-washed Fritillary) all flew together, I would have to lump some of them together as Large Fritillary and on the way back try to apportion the unknowns into the 3 species by catching a sample. It takes a lot longer but you are hopefully closer to the truth. The recent BCE Transect paper [http://www.bc-europe.eu/upload/Manual\\_Butterfly\\_Monitoring.pdf](http://www.bc-europe.eu/upload/Manual_Butterfly_Monitoring.pdf) does not really address this issue properly. It recommends counting all butterflies. For quantitative data and difficult groups then omitting *Pyrgus* altogether or counting them as *Pyrgus* species might be an answer. In many places in Southern

Europe, it is not only *Pyrgus* that cannot reliably be separated. You can have several *Pierids* (Whites) or *Polyommatus* (Blues) flying together. I think there is a role for EIG here. Firstly, can we establish whether transects do give repeatable results or is the operator error and variance too great. If you think about it, establishing a transect that subsequently shows improving numbers might just mean that the transect walker gets better at spotting or identifying butterflies and lets fewer go unrecorded. If you need to count species groups and then separate into species what sort of effort is required to get a consistent ratio of the species within a species group. Paul Kirkland of BC Scotland ran a training workshop in Romania last year Pages 28-30. I think an interesting and useful exercise would be to test the transect methodology in an environment where butterflies are both abundant and diverse and where there are lots of seemingly indistinguishable species groups. Paul & I will look into doing this as an EIG project in 2014.

The Thriplow funding of part of the expenses of participants in EIG surveys has been very welcome. It has brought us new leaders, enabled some of us to do more than we could otherwise afford and focussed our attention on the more threatened of Europe's butterflies. It was always only a contribution to an expensive working holiday. It has helped us build partnerships with colleagues in Europe who don't have the time or resources to do such surveys themselves. A big 'Thank You' to the Thriplow Charitable Trust. Next season's projects are already selected and the remaining monies allocated. For the future, we must think of building on this success. We can put into the field small self-funded teams of European butterfly experts that are at least a match in terms of numbers and expertise with what is available in the nations of particularly southern Europe. We want to work with our partners in Europe and where possible help them with their expenses so that together we can really make a difference. We have done this and are doing this in lots of countries. If you know of any charitable trusts, wealthy donors or generous companies that we should approach then please tell me.

One of the highlights of EIG activities this year is the conference in Digne les Bains on 28-30 June. See pages 6&7 for full details. Now most of it is sorted and the bookings are coming in the email traffic has subsided a bit. We have a great programme and it will be a huge amount of fun, for me it will be a great opportunity to meet new people and see old and dear friends. **YOU ABSOLUTELY MUST COME.** We have had so much help from so many people but a huge thank you to Jude Locke, EIG representative in France. The important nuance of many of our email conversations with our French colleagues was being lost and we were in danger of going round in circles until Jude stepped in. Now I email Nicholas Maurel of Proserpine our French partner in Digne in English and he replies in French and the almost simultaneous translation in both directions by Jude has been a very great help. Thank you Jude.

The conference in France has highlighted a glaring hole in the EIG country pages – France. Lots of butterflies, lots of diverse regions and, in many ways, as big a task as the rest of Europe put together, it is on our doorstep and the first port of call for many EIG members and others fed up with the English weather and determined to see something spectacular. So we have made a start. Most contributions are from English ex pats resident in France or with holiday properties in France. Mike Prentice is going to pull it together but we have contributions now for six or seven regions including Lot, Dordogne, Var, Vaucluse, La Brennes, Poitou Charentes, Hautes Alpes, Southern Loire, Midi Pyrenees. This is a fantastic resource and will be useful to many people going to see butterflies in France. We give you a sample of La Brennes on Pages 13-17. Are there any EIG members familiar with other regions who can help us fill the gaps if so please get in touch?

I am often asked for a list of butterflies for a European country and better still a recording form for use in the field or better still with the first beer of the evening in the campsite or hotel. We are aiming to produce a list for most countries in Europe and a few are already there. Our new webmaster Mike Haigh has created a very useful macro that takes an Excel spreadsheet consisting of a list of butterflies in Latin & English down the left hand side and column headings for location, date, Easting and Northings

etc for which entries can be made for each species encountered. What the macro does is translate this table into a one row per record database either for one's own use or to send to the recording scheme in the country in question. We now can run this macro by clicking on a button. The instructions should have 'who to send it to'. Ideally, we would want to send it to as local a recording scheme as possible but for most countries it will be a national scheme. Used in conjunction with a GPS such as an Etrex, you can download a series of waypoints as an Excel table, paste them into our spread sheet and, if you record the waypoint at the top of the column, it will 'look up' Eastings and Northings. It saves a lot of typing. Eastings and Northings are international and there is no way we can handle lots of different national grids like the Ordnance Survey in the UK though there is nothing to stop you putting a grid reference into these column headings.. If this GPS technical jargon means nothing then you are missing something – they are very useful – see pages 35-38. The form will also allow you to print a field recording sheet on not more than two pages that are best done back to back on the same sheet of paper. I will try and demonstrate at the EIG AGM in Stratford on 26<sup>th</sup> October 2013.

We don't often send out requests for members to support online petitions but the recent one on CAP (Common Agricultural Policy) reform was an exception. Despite the hard work of the Birdlife, RSPB, EFNCP and BCE's Sue Collins to try and get the CAP delivering an element of public goods for all that public money, the recent vote in the European Parliament was disappointing though I did get a reply from a Labour MEP (Derek Vaughan) that was very supportive. I know other EIG members also received letters from their MEPs.

**Simon Spencer**

Chairman EIG

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## Update on EIG/Proserpine Conference in Digne les Bains 28-30 June 2013

We now have a completed programme of talks (see below) and it will be an exciting event. There is still time to book and accommodation available. It will bring together most of the main butterfly specialists in France and part of our aim is to encourage cooperation between individuals and organisations across France.

### COLLOQUE INTERNATIONAL BUTTERFLY CONSERVATION-PROSERPINE INTERNATIONAL CONFERENCE BUTTERFLY CONSERVATION EIG - PROSERPINE

## les 29 et 30 juin 2013 à DIGNE-LES-BAINS

29th and 30th June 2013 at DIGNE-LES-BAINS Alpes-de-Haute Provence FRANCE

en partenariat avec le Muséum National d'Histoire Naturelle  
with the support of the Muséum National d'Histoire Naturelle

SAMEDI 29 JUIN SATURDAY 29 JUNE	Horaire Hour	DIMANCHE 30 JUIN SUNDAY 30 JUNE	Horaire Hour
<b>OUVERTURE DU COLLOQUE</b> : discours des représentants d'EIG et Proserpine <b>OPENING OF THE CONFERENCE:</b> welcome and introduction by representatives from Proserpine and EIG	9 h 15	<b>Davis DEMERGES – CEN Midi-Pyrénées</b> : L'Atlas des rhopalocères et zygènes de Midi-Pyrénées : un outil de sciences participatives  Atlas for the butterflies and burnet moths of the Midi-Pyrénées: a participatory scientific working tool	9 h
<b>Jim ASHER - Vice-Chairman de Butterfly Conservation</b> La cartographie des papillons de Grande-Bretagne et d'Irlande. Un bel exemple d'une grande oeuvre volontaire pour des conclusions importantes Cartography of the butterflies of Great Britain and Ireland. An excellent example of a large voluntary collaboration with important conclusions	9 h 30	<b>Henri DESCIMON</b> — Pr. honoraire au <b>Laboratoire de Systématique évolutive, de l'Université de Provence</b> : <i>Les Parnassius français : passé, présent, avenir</i> The French <i>Parnassius</i> : past, present and future	9 h 30
<b>Pascal DUPONT – Muséum national d'histoire naturelle</b> : Inventaire national des Rhopalocères et Zygènes de métropole. Des données pour quoi faire ? The national inventory of butterflies and day flying moths of France. To what purpose can the recordings be best used?	10 h	<b>Jean-Yves GUILLOSSON</b> ■ Le Crouzet (Gard), lieu de passage des papillons dans les Cévennes gardoises Le Crouzet (Gard), the butterfly thoroughfare of the Gard department of the Cévennes	10 h
<b>Tristan LAFRANCHIS, naturaliste auteur d'ouvrages de référence sur les papillons d'Europe et Jean-François RUAS ingénieur agronome</b> : L'impact de l'agriculture en France sur les papillons ces dernières 40 années The impact of agriculture in France over the last 40 years on butterflies	10 h 30	<b>Nicolas MAUREL – fondateur de Proserpine:</b> 10 ans d'inventaire au Jardin des papillons de Digne-les-Bains 10 years of butterfly recording in the Butterfly Gardens of Digne-les-Bains	10 h 30
<b>Raphaëlle ITRAC-BRUNEAU - OPIE</b> : Présentation du Plan national d'actions (PNA) en faveur des Maculeina en France : objectifs et état d'avancement Presentation of a national plan of action for	11 h	<b>Magali-Deschamps COTIN et Marie-Hélène LIZEE</b> ■ <b>Institut de Recherche et de Développement (IRD):</b> <i>Les rhopalocères des parcs et jardins de</i>	11 h

<a href="#">Maculinea in France : objectives and progress report.</a>		Marseille Butterflies of the parks and gardens of Marseille	
<b>Stéphane BENCE – CEN Provence-Alpes Côte d’Azur :</b> <i>Vers une liste rouge régionale pour servir une stratégie de conservation</i> <a href="#">Working towards a regional red list of butterflies as a strategy for conservation.</a>	11 h 30	<b>Christian PERREIN – historien</b> <i>La Biohistoire des papillons dans l’ouest de la France</i> <a href="#">Biography of butterflies in the West of France</a>	11 h 30
<b>Brigitte et Peter KAN – entomologistes-cinéastes:</b> Film documentaire – Le Machaon en Provence <a href="#">Documentary film – The Swallowtail in Provence</a>	12 h	<b>Yves LANCEAU et Nathalie TRUCHET</b> <b>naturalistes cinéastes</b> <i>Film documentaire – Etonnants papillons d’Europe, l’envol par nature</i> <a href="#">Documentary film –The astonishing butterflies of Europe, nature’s flight</a>	12 h
<b>INAUGURATION</b> <a href="#">OPENING CEREMONY</a>	12 h 30	<b>CLOTURE DU COLLOQUE</b> <a href="#">CONFERENCE CLOSURE</a>	12 h 30

Download the brochure from <http://www.bc-eig.org.uk/> . Details of dinners and accommodation as well as the booking form are in the brochure. There will be field trips in the afternoons and an opportunity to visit the Jardins de Papillons where 137 species of butterfly have been recorded. Accommodation and dinner bookings still available. Please book for the conference by June 1<sup>st</sup>.

## NOTICES

### 2014 EIG Calendar Competition

We have produced an EIG Calendar now for 5 years which is very popular and we shall be producing another one for 2014. The competition is open to all EIG members and it would be nice if more members sent in their photos so get your cameras out and send your photos to Anne email: [rhoslan.anne@gmail.com](mailto:rhoslan.anne@gmail.com) before 1<sup>st</sup> September 2013. The following is the format etc., required for the photos:

#### Photos for the calendar should be:

- \* JPEG files only
- \* Minimum 1500 pixels on the long edge
- \* Subjectively, the photos must also be sharp

**Note: Many photos have been submitted previously that don't meet this requirement and they have to be rejected as they are unlikely to print well. Most modern cameras will produce images that meet or exceed this specification.**

We would like a bit of blurb about the butterflies – Latin & English name, where/when they were photographed and any other relevant information etc.

## **HIGHLIGHTS OF A WEEK ON LA PALMA, CANARY ISLANDS**

### **2 - 9 February 2013**

The idea was to find some winter sun and as many of the La Palma/Canary Island endemics as we could in the space of one week. The small group consisted of Teresa Farino, David Dennis, Neil Thompson and Peter Bygate. Accommodation had been booked for the week in the medium-sized town of Los Llanos on the western side of the island.

La Palma is a small, tear-drop shaped island formed around the dramatic Caldera de Taburiente rising to 2,421 metres lying in the path of the north-east trade winds which give rise to frequent rain on the east coast and in the north, whereas the western and southern aspects tend to be sunnier and drier. Indeed, this was very much our experience on this trip, often found out the hard way!

#### ***Pieris cheiranthi* ssp. *benchoavensis* Canary Island's Large White**



**Female**



**Male**

This species was seen in several locations in the northern 'half' of the island including sites near to Santa Cruz and around Los Llanos in the west. The habitats it occupied were varied, ranging from the deep, dry Barranco de las Angustias and the more lushly vegetated Barranco del Jurado to the south of Tijarafe in the west, to the barrancos leading down to the north-east coast. Our experience in the north-facing wet barrancos containing laurisilva forests seemed to redefine this 'classic' relationship between *cheiranthi* and this habitat as none were seen, but the species was present in the more open deciduous woodlands immediately below the laurisilva belt. Another association perhaps to be redefined concerns the larval host plant for *cheiranthi*: Teresa had watched and photographed (see above) a female *cheiranthi* apparently trying to oviposit high up on a clump of *Descurainia millefolia* - a hitherto unknown foodplant - but was this crucifer being used instead of the apparently more favoured *Crambe strigosa*, not a trace of which had been seen since we arrived? (Teresa has subsequently witnessed the same attempted behaviour in Tenerife and, more unexpectedly, believes to have seen *cheiranthi* in the Juego de Bolas botanical garden on **La Gomera** where it has been absent for the past 30 years. *Crambe* was also present although no eggs or larvae were found). Finally, we discovered that *Rumex lunaria*, a medium-sized shrub with highly reflective leaves, was favoured as a resting place by *cheiranthi* (and also *rapae*) affording them superb camouflage.

#### ***Cycliurus webbianus*, Canary Blue**

This species was encountered throughout the island, the highest altitude being around 1,000 metres at the Ermita Virgen del Pino in the centre of the island.

### ***Gonepteryx cleobule* ssp. *palmae*, Cleopatra**

The north-east barrancos produced most sightings of this butterfly although it was by no means a regular sight with perhaps no more than six individuals being seen across three separate locations. Photography was also difficult as they stopped rarely, and then only fleetingly, but David managed to rattle off a few shots of a male nectaring on yellow jasmine in the barranco to the immediate south of Los Sauces.

### ***Parage xiphioides*, Canary Speckled Wood**

A common butterfly of open woodland and hillsides though not seen in the southern part of the island.

### **NEW TO LA PALMA**

#### ***Cacyreus marshalli*, Geranium Bronze**

Apparently not previously recorded on the island, a single individual was seen and photographed by Peter in the shallow Barranco del Carmen on the north-western outskirts of Santa Cruz. Pelargoniums grew locally both as occasional naturalised hedgerow plants and more abundantly in a cottage garden on the LP101 no more than ½ kilometre from the sighting.



#### **Other species seen:**

***Pontia daplidice*, Bath White**, only 2 or 3 sightings

***Pieris rapae*, Small White**, common

***Colias crocea*, Clouded Yellow**, a singleton in the north-west spotted by Teresa

***Lycaena phlaeas*, Small Copper**, seen at four locations mostly as singletons

***Zizeeria knysna*, African Grass Blue**, seen at, and just inland from, Puerto Tazacorte in the west

***Aricia cramera*, Southern Brown Argus**, at a single location near Las Tricias in the north-west

***Danaus plexippus*, Monarch**, in Los Llanos suburbs and the nearby Barranco de las Angustias

***Danaus chrysippus*, Plain Tiger**, three sightings, all in flight, around Los Canarios in the south and in the vicinity of Puerto Tazacorte

***Vanessa vulcania*, Canary Red Admiral**, occasional sightings on the east: the first butterfly of the trip spotted by Neil nectaring on tree-heather

***Vanessa cardui*, Painted Lady**, not common seen mostly on the south-west coast

***Vanessa atalanta*, Red Admiral**, just one, seen by Teresa

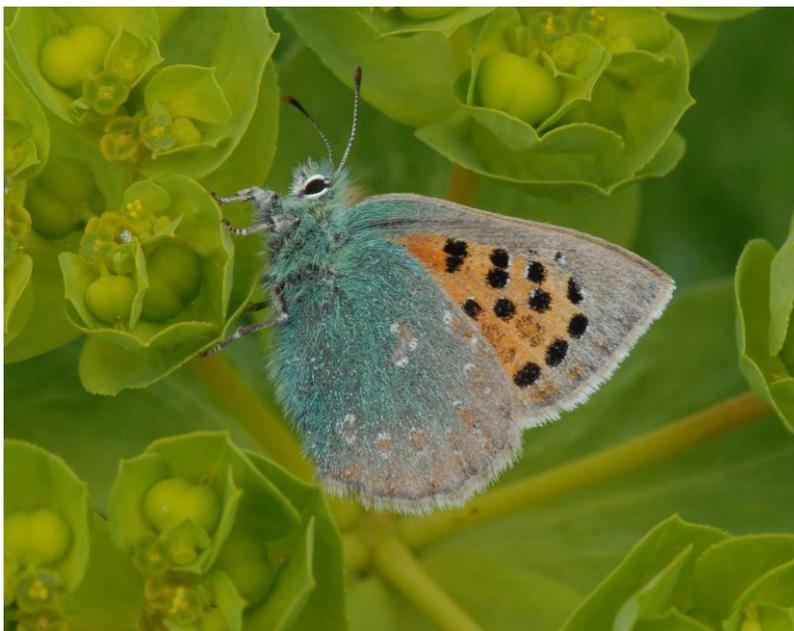
**Peter Bygate**

## Southern Spain 2nd – 8th April 2013

Amongst European butterfly species, there are a select few that fly exclusively in the early Spring. The distribution of several of these is largely confined to Spain, including the enigmatic Spanish endemic Spanish Greenish Black-tip *Euchloe bazae*. We made a short trip to eastern Andalusia in early April in the hope of catching up with some of these species.

Even in southern Spain, early Spring weather can be fickle and so it proved. Our first day in the field saw cool winds and rain showers that kept butterflies scarce but, in the gently rolling countryside west of Granada we found a scattering of Large White *Pieris brassicae*, Small White *Pieris rapae*, Clouded Yellow *Colias croceus* and a few Painted Lady *Vanessa cardui* along with Southern Brown Argus *Aricia crameri* and Common Blue types which appeared to be of the form *Polyommatus celina* (recently elevated to full species status).

Over a short grassy field, we also discovered the first of our Spring target species, Provence Hairstreak *Tomares ballus*. These darted around fast and low and, even once located, proved very difficult to follow. With their wings always closed at rest, the turquoise-green under hindwings and black-dotted orange patches in the under forewing are remarkably subtle and well camouflaged. The extensive orange patches on the upperwing of the female give it an impression almost reminiscent of a Small Heath *Coenonympha pamphilus* in flight.



Provence Hairstreak *Tomares ballus*

Imagining that knowledge of the food plant might be crucial to finding such a localised species as *Euchloe bazae*, we were amazed to discover that their LHP, the creamy-white crucifer *Eruca vesicaria*, is seemingly very common and widespread in many open habitats in southern Spain. We stayed overnight near Baza. Next day dawned sunny and clear and remained so all morning but it was cold overnight and no butterflies were on the wing until 10.30 am. Checking out some known localities for *E bazae* in the northern part of the Hoya de Baza, we started to explore the strange, stark, steppe landscape of dry gypsum hills where it is found. The bare ground between the scattered tussocks of Esparto grass are littered with gypsum crystals which catch the light like shattered shards of glass. At first we saw much the same species as yesterday, including a few *T ballus*, but then encountered some fast flying white *Euchloe* species which, when they eventually perched, turned out to be Portuguese Dappled White *E tagis*. Realising that there are several other possible look-alikes flying here, we continued to check each of them and so discovered a couple of Bath White *Pontia daplidice*. However, we later realised that this

was by no means the end of the story and that these early-flying dappled whites present an interesting identification challenge unless good views at rest can be obtained.



Gypsum hills, Hoya de Baza – habitat of *Euchloe bazae*

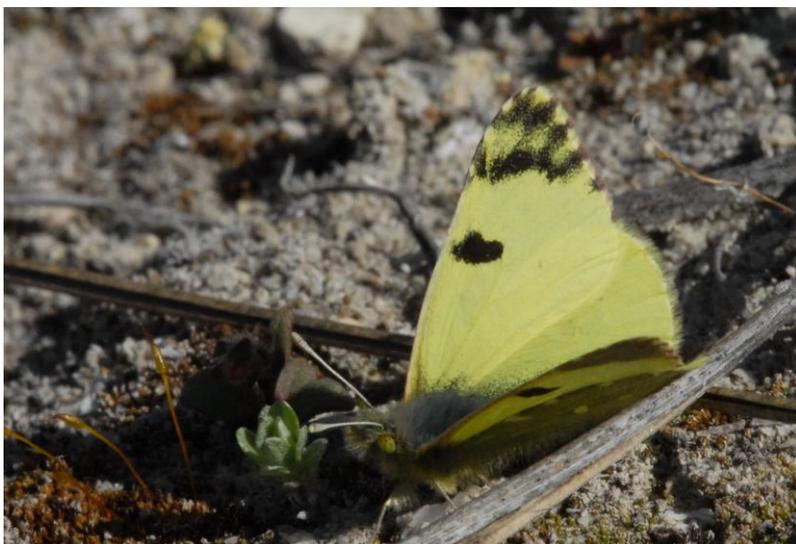
Wall Brown *Lasiommata megera* and Red Admiral *Vanessa atalanta* were added to our tally for the trip but then overcast conditions and heavy rain put paid to hopes of any more butterflies. The clouds and rain continued overnight and most of the next morning (in what is allegedly one of the driest parts of Spain!). So, it wasn't until mid-afternoon that we found some patches of sunshine and a few butterflies. These included more white *Euchloe* spp to keep us on our toes, this time several Western Dappled White *Euchloe crameri*. They appeared very similar in flight but at rest the *E crameri* were noticeably larger than the *E tagis* with a subtly different wing-tip pattern and more boldly marked white spots on the under-hind-wing, delicately speckled with black and yellow in the green.



Western Dappled White *Euchloe crameri*

Next morning we were back to the gypsum hills but this time in the southern part of Hoya de Baza. We saw several *T ballus* but also more white *Euchloe*, including several *E tagis* and *E crameri* and also a Green-striped White *Euchloe belemia* but still no sign of *E bazae*. The clouds and rain showers continued to frustrate us and so we decided to try to escape them by heading to the coast at Almeria. Meanwhile, we heard via email that Chris van Swaay and friends were also in Andalucía and, unbeknown to us, had been watching *E bazae* 2 days ago at a site just a few kilometres away from where we had been looking on the same morning! Next day near Almeria in the coastal dunes N of Cabo de Gata we found another *E belemia* and both here and in the mountains on the Cabo saw many more white *Euchloe* spp. However, our experiences over the last few days had taught us to be cautious about assuming the identity of passing dappled whites. In a rocky gully on the west side of the Cabo de Gata we glimpsed a single Spanish Marbled White *Melanargia ines* and near El Pozo de los Frailles we found a small colony of Black-eyed Blues *Glaucopsyche melanops* around the yellow flowers of *Genista* spp bushes. To the north of here we searched the coastal areas for Christ's Thorn *Paliurus spina-christi* bushes and, although we found a few of these, there was no sign of any Common Tiger Blue *Tarucus theophrastus* that we had hoped to find with them.

An evening drive to Baza found us next morning back in the gypsum hills. Chris van Swaay had very kindly shared the GPS data of the site they had found *E bazae* earlier in the week so we decided to explore this area. We followed the GPS reference out into the anonymous gypsum hills but were puzzled that the numbers did not quite stack up. However Chris had also mentioned that *E bazae* likes to hilltop so we followed his instructions to what we thought was the correct ridge and then waited. Wall Brown, Swallowtail *Papilio machaon* and lots of white *Euchloe* species appeared from 11.00 onwards; then suddenly, there was our quarry flitting fast and low, a beautiful *E bazae*, delicate lemon yellow and with strong black markings and olive green on the underwing! We searched along the ridge for the next hour and were thrilled to find a total of 10 *bazae*. Convinced that we had relocated Chris's site, we decided to explore some promisingly similar hills to the west to see if we could add some new site data. On route we encountered several more *bazae*, including one in a valley bottom, and then sure enough on the other hills we did indeed find more *bazae*, taking our total for the day to 19 individuals. However, in taking the GPS reference for these new sites, the penny dropped. The GPS numbers for here were identical to Chris's site which we had now accidentally re-discovered! We realised that we had originally misread the GPS reference as degrees and decimal minutes instead of decimal degrees and had thus inadvertently discovered several new sites - an amusing conclusion to our hunt for one of Europe's most elusive species.



Spanish Greenish Black-tip *Euchloe bazae*

We finished the day checking out a valley at Gor (near Gaudix) where we saw both Brimstone and Cleopatra but in another valley east of Granada, which was a locality we had for Chapman's Green Hairstreak *Callophrys avis*, we failed to find it or indeed any sign of its food plant.

Our final day was spent visiting the Alpujarras near Orgiva, south of the snow-capped peaks of the Sierra Nevada, where the sunny and luxuriantly green Mediterranean slopes were something of a contrast to the semi-desert steppe we had been exploring for most of the trip. In grassy glades amongst the orange groves, we found a host of new butterflies for trip including Provence Orange-tip *Anthocharis euphenoides*, Spanish Festoon *Zerynthia rumina*, Scarce Swallowtail *Iphiclides (podalirius) feisthameli*, Geranium Bronze *Cacyreus marshalli* and Speckled Wood *Parage aegeria*. During a brief stop in the hills W of Granada on our return towards Malaga we added Green Hairstreak *Callophrys rubi*, giving a total of 26 butterfly species in 7 days. The weather had been more than a little frustrating and we had missed a few of our hoped-for Spring target species – False Baton Blue *Pseudophilotes abencerragus*, Chapman's Green Hairstreak, Common Tiger Blue and Desert Orange-tip *Colotis evagore* – but then, as they say, you always need to leave something to go back for!

### Martin Davies and Mike Prentice

The following article is one of a series for the EIG website country pages as a regional guide to France. We also have articles on Dordogne, Var, Vaucluse, Lot, La Brenne, Poitou Charentes, Midi Pyrenees and Southern Loire. We would welcome a few more especially from the Alps. Ed.

### The Brenne - 100 butterfly species on your doorstep



Unfortunately a bit of an exaggeration; only 99 species have been identified with certainty here in the last few years, and it does take the best part of a day to get to the Brenne from Britain. That said, the Brenne is an easy six or seven hours drive from England's channel ports, readily accessible from three regional airports (Tours, Poitiers and Limoges) served by Ryanair, or can be reached by Eurostar from St.Pancras to Poitiers via Lille and then car hire.

**Any butterfly enthusiast visiting the area can help conservation by sending in their records.**

The Brenne is a very good area for butterflies yet relatively under-watched. It is hoped that this short article may induce more butterfly-knowledgeable people to visit the area and for them and others who already know the area to send in their records. They could well contribute to the



Alcon Blue (*Phengaris alcon*)

local conservation effort and we particularly need more information on some of the rarer species.

The Woodland Brown (*Lopinga achine*), first discovered in 1999 by an organised group of Brits, is now known to be quite widespread and locally common in the area, unknown localities almost certainly exist and need to be found.

The Duke of Burgundy (*Hamearis lucina*) occurs, but appears to be very rare, once again the first recent record was provided by visiting British naturalists but in the last 5 years there have been only 3 sightings, as far as we know, all in the Lancosme forest.

A previously unknown Alcon Blue colony was discovered in 2010, one of only 5 in the Brenne; management for the species has started at the site, without its discovery it may well have disappeared forever without anybody knowing.

In this short article we include information of some of the better known interesting sites with public access which are well worth a visit. However, there are probably many good sites that are still under-recorded or unknown.

The Brenne in central France is now well known as a birding destination, particularly as an easy place to start foreign birdwatching. The same is true for butterflies with numerous species of both woodland and grassland habitats; many species that are rare in Britain are fairly common



Large Blue (*Phengaris arion*)

here: Camberwell Beauty (*Nymphalis antiopa*), Large Copper (*Lycaena dispar*), Wood White (*Leptidea sinapis*)... There are many others that aren't found in Britain: Black-veined White (*Aporia crataegi*), Weaver's (*Boloria dia*) and Marbled Fritillaries (*Brenthis daphne*), Map (*Araschnia levana*), Alcon (*Phengaris alcon*) and Idas Blues (*Plebejus idas*) and Lesser Purple Emperor (*Apatura ilia*) to mention just a few. With nearly 100

species of butterflies to look for over a relatively small area, 30 miles by 20, and with many sites open and easily accessible to the public from the many small lanes and public footpaths that criss-cross the area, it's easy to see 50 species in a few days during late spring or summer; providing that the weather is cooperative, which it usually is.

For the more localised species, there are three main areas:

- limestone sites to the west (mainly north of Le Blanc), the wet meadows of central Brenne (the best bird-watching area) and the extensive Lancosme forest to the east.

The most accessible and rewarding limestone sites include the valley at "La Boudinière" (Woodland grayling (*Lopinga achine*), Weaver's Fritillary (*Boloria dia*), Berger's Clouded Yellow (*Colias alpharcariensis*), Ilex Hairstreak (*Satyrium ilicis*)...), the "Bois des Roches" regional nature reserve with the same species, the hikers trail on the disused railway track at "les Cloîtres" has Large Blue (*Phengaris arion*) and the dry stone meadows at "le Grand Veillon" next to the main road just south of Pouligny-St.-Pierre (Berger's Clouded Yellow (*Colias alpharcariensis*), Red Underwing Skipper (*Spialia sertorius*), False Grayling (*Arethusana arethusa*)...). The area is well worth a day's exploration.



*Satyrium pruni* (Black Hairstreak) Thécla coudrier

Much of central Brenne can be of interest, walking the many paths near Chérine nature reserve can be rewarding (Camberwell Beauty (*Nymphalis antiopa*), Large Tortoiseshell (*Nymphalis polychloros*), many fritillaries, hairstreaks, skippers...). Other productive sites open to the public include the "Communaux" and "Champs de Foix" at Rosnay and the public footpaths around the Blizon village a little farther north.

The Lancosme forest can be very good and is worth at least a full day's visit. The tracks around the "Rond de St.-Sulpice" and small road between the "Rond de St.-Sulpice" and the "Rond des Cinq Frères" are the best known places for sightings of the rare Woodland Brown (*Lopinga achine*) as well as both Purple Emperors (*Apatura iris* and *ilia*) and Large Chequered Skipper (*Heteropterus morpheus*). Nearby, a walk along the D21 road west of the "Carrefour du Gué Rossignol" may provide sightings of many species including Chequered Skipper (*Carterocephalus palaemon*), Pearly Heath (*Coenonympha arcania*), Map (*Araschnia levana*), Heath Fritillary (*Mellitea athalia*) and maybe even Duke of Burgundy (*Hamearis lucina*). The Dryad (*Minois dryas*) can be found, sometimes in large numbers, along tracks to the north-west of the forest; but this species flies late, in late July and August at a time when fewer other interesting species are active.

There are many more sites and many more interesting species but space doesn't allow mention of them all. Nearly all the species that occur here can be seen using tracks or sites that are open to the public. However, a handful of species only occur on private land and are thus

difficult to see. Two species that spring to mind are Alcon Blue (*Phengaris alcon*) and Idas Blue (*Plebejus idas*); they occur at a few restricted sites here and can only be seen during accompanied outings organised by the LPO. (Ligue pour la Protection des Oiseaux)



Good butterfly habitat in La Brenne

When to come! This obviously depends to a large extent on the desired species. Mid-May to mid-July is generally the best period. Many of the rarer species have just one generation a year so that the visitor needs to choose the correct dates if a particular species is sought-after, some examples: Woodland Brown (*Lopinga achine*) throughout June, Purple Emperors late June early July, Camberwell Beauty (*Nymphalis antiopa*) very

early spring or July/August, Large Blue (*Phengaris arion*) late June and most of July, Alcon Blue (*Phengaris alcon*) most of July, Dryad (*Minois dryas*) in August.

Butterflies haven't been extensively studied here and there are probably undiscovered species to be found and new sites to be uncovered. If you come to the area and see some interesting species we should very much appreciate receiving your records that may well contribute to our knowledge and thus conservation efforts here. Whatever, I am sure that if you do come looking for butterflies and the weather is sunny and mild (as it often is), you won't be disappointed.

So if you come, have a look at any seemingly interesting habitat and please send in your records – Tony Williams (LPO – Brenne, Maison de la Nature, 36290 St.-Michel-en-Brenne, France) [lpobrenne@aliceadsl.fr](mailto:lpobrenne@aliceadsl.fr) - all information will be kept confidential in order to protect sites. And if you come across any incorrect behaviour, such as collecting, please let us know as soon as possible so that we can take immediate and suitable action.

Below is a list of more interesting species that are regularly seen here.

Species		Status	Flight period
Mallow Skipper	<i>Carcharodus alceae</i>	small numbers throughout	summer
Tufted Marbled Skipper	<i>C. flocciferus</i>	no recent records, confirmation needed	summer
Oberthur's Grizzled Skipper	<i>Pyrgus armoricanus</i>	fairly common throughout	May, June and August
Chequered Skipper	<i>Carterocephalus palaemon</i>	local, around "forêt de Lancosme"	June
Large Chequered Skipper	<i>Heteropterus morpheus</i>	local, sometimes common	June and July
Scarce Swallowtail	<i>Iphiclides podalirius</i>	common throughout	summer
Swallowtail	<i>Papilio machaon</i>	fairly common throughout	summer
Wood White	<i>Leptidea sinapsis</i>	common throughout	summer
Black-veined White	<i>Aporia crataegi</i>	abundant throughout	late May and June
Berger's Clouded Yellow	<i>Colias alfacariensis</i>	common on limestone in west	June/July
Clouded Yellow	<i>C. crocea</i>	often abundant, widespread	Commonest in summer
Duke of Burgundy Fritillary	<i>Hamearis lucina</i>	a few observations since 2006,	late April/late May
Sloe Hairstreak	<i>Satyrrium acaciae</i>	uncommon	June/July
Ilex Hairstreak	<i>S. ilicis</i>	locally common	June/July
Black Hairstreak	<i>S. pruni</i>	uncommon	May/June
Sooty Copper	<i>Lycaena tityrus</i>	widespread and common	summer
Large Copper	<i>L. dispar</i>	local, has declined	Late May and late August/early September
Long-tailed Blue	<i>Lampides boeticus</i>	rare	autumn
Short-tailed Blue	<i>Everes argiades</i>	widespread and common	summer

Provençal Short-tailed Blue	<i>E. alcetas</i>	uncommon in west, apparently increasing	summer
Alcon Blue	<i>Maculinea alcon</i>	rare and very localised, five known sites	July
Large Blue	<i>M. arion</i>	a few sites in west	Late June/July
Woodland Brown	<i>Lopinga achine</i>	locally common	Late May/early July
Pearly Heath	<i>Coenonympha arcania</i>	locally common	Late May, June and July
Great Banded Grayling	<i>Brintesia circe</i>	common	July to early September
Dryad	<i>Minois dryas</i>	Very local	early August/early September

So, please don't hesitate to come, and send in those records. Tony Williams (Brenne and Indre Butterfly recorder for EIG [lpo.brenne@aliceadsl.fr](mailto:lpo.brenne@aliceadsl.fr)).

**Tony Williams**

### ***Distribution analysis of two similar Colias species in the Rhône département of France***

Pale Clouded Yellow (*Colias hyale*) and Berger's Clouded Yellow (*Colias alfacariensis*) are acknowledged by the majority of experienced lepidopterists as being inseparable from observations of imago in the natural position in the wild. Whilst uppersides may be glimpsed or photographed during courtship rituals, otherwise the butterflies always settle with wings closed. With the forewing raised it is usually possible to separate females from males, but with the forewing tucked down it may not even be possible to separate from a third species, Clouded Yellow (*Colias crocea*). In flight, confusion with *C. crocea* is eradicated for all males and most females as the orange-yellow uppersides are easily distinguishable. A small percentage of females of *C. crocea* have whitish uppersides, form *helice*, and are thus prone to be identified as females of either *C. hyale* or *C. alfacariensis*.

From a photograph of *C. hyale/C. alfacariensis* with wings closed, the only frequently used criterion for identification concerns the shape of the outer margin of the forewing to the apex; an ensemble considered as overall more rounded for *C. alfacariensis*. There is much debate as to whether this feature is reliable in the identification of random individuals. Netting butterflies and manipulating in the hand to scrutinize markings and colouration of uppersides is also supposed to provide identification clues. However, doubt will inevitably subsist in the analysis of random individuals. It should also be noted that a butterfly should not be handled unless the release of the insect unharmed can be guaranteed.

In France the species *C. hyale* and *C. alfacariensis* are shown as being fairly widespread on distribution maps at département level (Lafranchis, 2000). There are therefore many départements where both species are potentially present. For local lepidopterists, evaluating the genuine distribution pattern of each species within a single département poses a significant challenge. It should of course be noted that the relative presence of each species may be extremely variable from one département to another, and conclusions relating to variations in climate and altitude may not be constant.

I have been recording butterflies in the Rhône département of France since the year 2000. As I do not use a net, butterflies are observed in their natural positions and photographed for subsequent inspection.

In 2009 I decided it was necessary to prove the existence of both species. This seems a logical procedure for all local studies. At the same time it appeared that *C.alfacariensis* was relatively easy to observe but that *C.hyale* was a rare species.

There are two fundamental stages of analysis:

1. evaluation of habitat
2. rearing an egg through to imago

Only the second stage is absolute proof of identity of any individual.

Resolving the identification problem required three steps:

## **Step 1, confirming *Colias alfacariensis***

*C.alfacariensis* has quite exact habitat requirements. It is usually reported as using two larval host plants, *Hippocrepis comosa* and *Coronilla varia*. These plants are most common in dry, calcareous terrain although they may occur occasionally in dry situations on other soil types. In the Rhône département *C.varia* is the commoner plant.

I compared the distribution pattern of the calcareous terrain in the Rhône with that of observations of the butterfly, and I found that the two were similar. Furthermore, I found that the distribution maps for Adonis Blue (*Polyommatus bellargus*) whose host plant is *Hippocrepis comosa*, and Reverdin's Blue (*Plebejus argyrognomon*) whose host plant is *Coronilla varia*, were equally similar. [\[See figure 1.\]](#)

Males observed within this distribution range are usually a vivid, lemon yellow in flight. In contrast the females are clearly whitish. The sexes are thus clearly distinguishable in flight. Females have been observed laying on both *C.varia* and *H.comosa*. There have been no other eye witness accounts of egg laying on any other plants.

In April 2009, after witnessing egg laying on *C.varia* I reared two caterpillars through to imagos. As expected, the livery of the larvae confirmed the species as *C.alfacariensis*, the rows of black markings being very distinctive. [\[See figure 2.\]](#) These markings are perceptible from third instar. [\[See figure 3.\]](#) This experiment produced one male and one female butterfly, the male emerging 48 hours before the female. Both were released back into the wild into suitable habitat.

In the future, within this habitat structure, it is reasonable to record flying individuals as *C.alfacariensis*. It should be noted, however, that any egg laid on a different plant should be reared through to imago to find out if *C.alfacariensis* accepts other varieties of *fabaceae* or if in fact *C.hyale* is cohabiting with *C.alfacariensis*. There is also no harm in carrying out occasional further rearing on *C.varia* or *H.comosa* to check whether the larvae are always *C.alfacariensis* or if *C.hyale* also accepts one or both of these plants too.

## **Step 2, removing doubt with *Colias crocea***

*C.crocea* (Clouded Yellow) is a very common species, potentially present in every situation where either *C.alfacariensis* or *C.hyale* fly. It is most abundant in late summer and autumn when migrations are at a maximum, but it may be observed at any time from early spring

onwards. The females are reported laying on a variety of *fabaceae* covering most open habitat situations.

When only a single, white female *Colias* is observed at any site, much care must be taken not to confuse the *helice* form of *C.crocea* with either of the other two species. This is particularly important when the observation is in an area where neither of the other two species have been previously reported. Recording errors could therefore give the impression that the other two species are more widespread. In flight *helice* is usually distinguishable from the more extensive dark areas on the uppersides.

It also occurred to me that the mature larvae of *C.crocea* and *C.hyale* are similar. It seemed important to rear caterpillars of *C.crocea* in order to check the appearance of the final instar and also any other changes during larval growth. During 2009 I was fortunate enough to observe *helice* females egg laying on two separate occasions: the first time on *Lotus corniculatus* and the second on *Trifolium pratense*. I was able to rear from egg to imago on both occasions; the two butterflies which emerged were females of the usual orange-yellow form. Both were released back into the wild. The final instar caterpillars develop a row of little, black spots along the lateral stripe. [\[See figure 2.\]](#) At third instar the lateral stripe is distinctly visible and the caterpillar is already showing resemblance to the final instar. [\[See figure 3.\]](#)

### Step 3, confirming *Colias hyale*

In the Rhône département, any observations of butterflies identifiable as either *C.hyale* or *C.alfacariensis* are rare outside of calcareous situations.

In terms of the presence of *C.hyale* two conclusions seem possible:

- either *C.hyale* is mostly cohabiting with *C.alfacariensis* but is remaining undetected
- or *C.hyale* is a rare species

*C.hyale* is reported as using various species of *fabaceae* as larval host plants, especially lucerne and clovers. In France, two species are mentioned in particular: *Medicago sativa* and *Trifolium repens* (Lafranchis, 2000.) These species are generally widespread and common.

In terms of host plant requirements therefore, there is no particular reason to suppose:

- either that *C.hyale* is mostly cohabiting with *C.alfacariensis*
- or that *C.hyale* is a rare species

The apparent scarcity of *C.hyale* may then be due to some other ecological requirement?  
**(Footnote 1.)**

We had little data for *C.hyale*. These had been attributed through analysis of wing shape or habitat. I discovered that several data entries concerned observations on the fringes of confirmed habitat areas for *C.alfacariensis*, so these looked like errors. After elimination of those entries only four remained, and three of these were of 'singles'. Confirmation of the species from a single butterfly seemed unreliable, and revisiting sites where only singles had been recorded previously provided little guarantee of further observations.

Only one data entry remained: several individuals observed, including a courtship ritual, at a site in the Monts du Lyonnais at around 650m altitude on 3<sup>rd</sup> September, 2003. The site is an open,

non-calcareous area with some permanent grassland and pasture with clovers, as well as some fields of cultivated clover and lucerne. There are sweetcorn crops in between.

On 30<sup>th</sup> August, 2009 I revisited this site and found eight individuals flying: 7 males and 1 female. These adults were very active, nectaring in the areas of cultivated lucerne and clover, but also flying across the permanent grassland and nectaring on composites. I was immediately struck by the somewhat smaller size and paler appearance of the males in comparison to confirmed sites for *C.alfacariensis*. It was also very difficult to confirm the female in flight amongst the males, all the butterflies appearing pale. [\[See figure 4.\]](#) There was no evidence of any *C.varia* or *H.comosa* growing in this area.

After this visit I was convinced that I was looking at a colony of *C.hyale*. The habitat situation looked perfect and the appearance of the adult males in flight looked like something unfamiliar. It was necessary to observe an egg laying female at this site and rear the egg through to imago to prove the identity of the species.

I revisited the site on 27/09/2009 (3 males), 12/09/2010 (3 males), 19/09/2010 (3 males), 21/08/2011 (7 pale males), 21/09/2011 (12 butterflies, including courtship - males and females difficult to separate), 04/10/2011 (12 butterflies, including courtship), 16/10/2011 (5 males, 2 females - the females appearing rather white on this occasion, it occurred to me that when the sex was in doubt in flight the butterflies were probably males and that observations of females had been very few), 05/09/2012 (14 males, 2 females - including a mating pair)

Whilst it appeared that a permanent breeding colony occupied this site, I had been unable to observe an egg laying female on any of these visits. I decided it was necessary to search neighbouring areas for evidence of other colonies.

On 8<sup>th</sup> September, 2012 I discovered another good colony, approximately 10km as the crow flies from the original site, slightly lower down at around 550m. After observing 9 males flying across a cultivated lucerne field, I wandered into some adjacent, permanent grassland. The presence of a female on the ground close by was betrayed by a male who appeared and 'buzzed' her into the air. The pair rose upwards performing the usual energetic courtship ritual, the female always flying behind the male. I watched them for a couple of minutes before they inevitably disappeared from view. Instead of moving on I sat down for a ponder, and lo and behold the female returned to her initial resting spot in front of me. She remained motionless for a while, then deposited an egg on the upperside of a *Trifolium repens* leaf and flew away. At last I was able to rear an egg through to imago.

The egg stages and first instar caterpillar were literally identical to those of *C.alfacariensis* and *C.crocea*. In all three cases the egg was pale yellow when laid, turning to a pinkish colour and finally dark green. This dark green colouration is in fact the caterpillar itself showing through the roughly transparent egg shell. The freshly emerged caterpillar is greenish-brown with a black head and proceeds to consume the chorion for its first meal. The caterpillar then turns a brighter green with a black head.

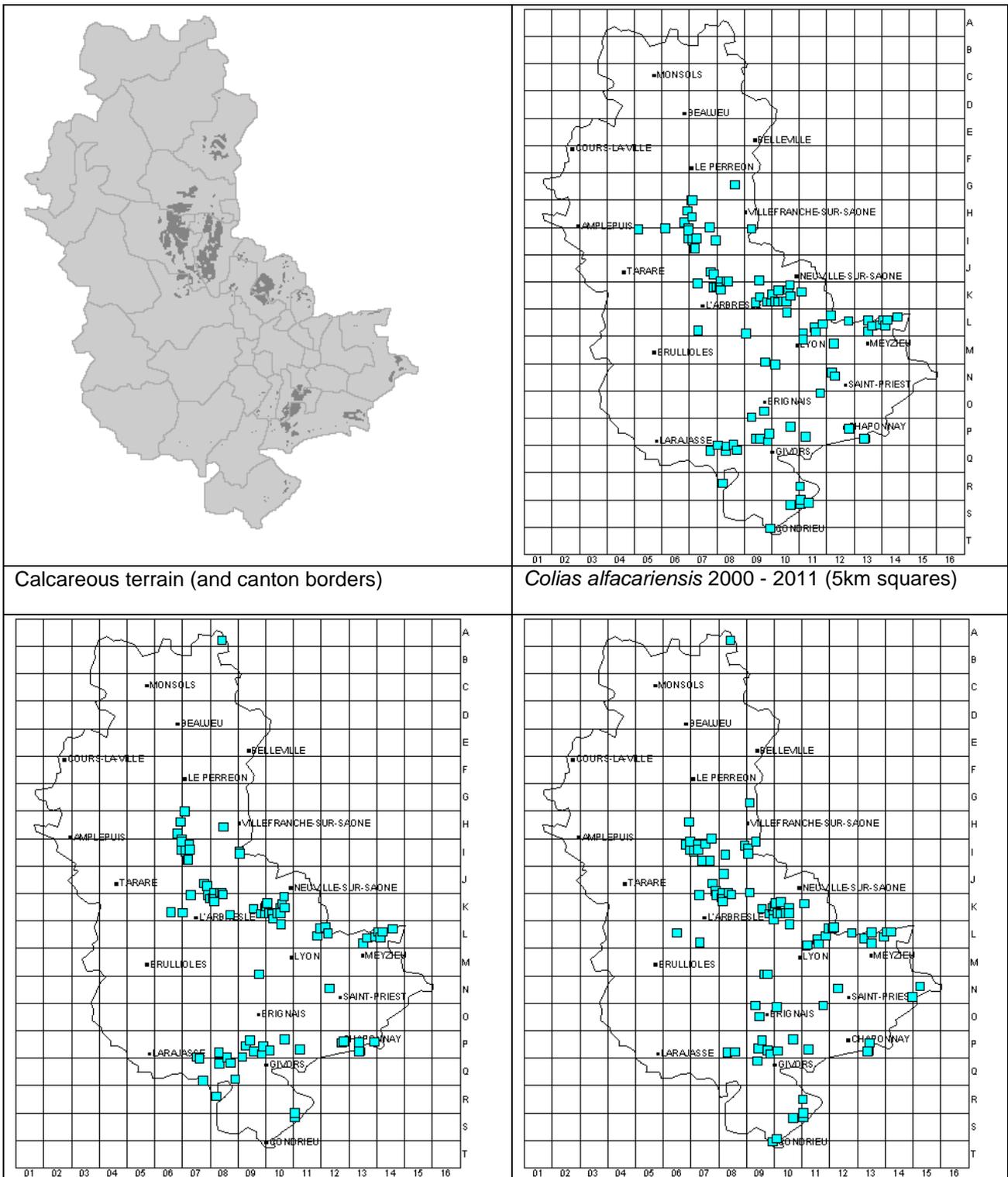
At the beginning of the third instar there was a significant change. The caterpillar had become a rather dark green with a much lighter head. [\[See figure 3.\]](#) Furthermore, this colouration reappeared at the beginning of the fourth and final instars. [\[See figure 4.\]](#) This was different to the experiences of rearing *C.alfacariensis* and *C.crocea* and looked to be an important diagnostic characteristic for determining *C.hyale* during larval development. The final livery of the caterpillar was similar to that of *C.crocea*, but without the small row of black spots along the flanks. [\[See figure 2.\]](#)

When the butterfly emerged from the chrysalis I was fortunate enough to be present. As the freshly hatched female clambered for a foothold I was lucky to be able to take photographs of the uppersides. [\[See figure 5.\]](#) With all the evidence already stacked in favour of *C.hyale*, this was the final, absolute confirmation of the species.

I was also able to take a photograph of the butterfly in profile. It is noteworthy that the outer margin is relatively rounded to the apex, thus throwing considerable doubt over the usefulness of this feature with regard to *C.alfacariensis*. [\[See figure 5.\]](#)

The butterfly was released an hour or so after emergence, at the site where the egg was laid.

Figure 1



## Figure 2

Final instar caterpillars, reared in captivity in the Rhône département (69), France.

### Final instar

*Colias hyale*, 2012 - on *Trifolium repens*



*Colias crocea*, 2009 - on *Lotus corniculatus*



*Colias alfacariensis*, 2009 - on *Coronilla varia*



### Figure 3

Immature caterpillars, reared in captivity in the Rhône département (69), France.

#### Third instar

*Colias hyale*, 2012 - on *Trifolium repens*



*Colias crocea*, 2009 - on *Lotus corniculatus*



*Colias alfacariensis*, 2009 - on *Coronilla varia*



Figure 4



*Colias hyale*, 2011, Monts du lyonnais - male on the right



*Colias hyale*, 2012, early fourth instar



*Colias hyale*, 2012, early final instar

Figure 5



*Colias hyale*, 2012 - female showing upperside markings



*Colias hyale*, 2012 - female showing inconclusive outer forewing shape for separation with *C.alfacariensis*

## Conclusion

The conclusion from this study in particular is that identifying *C.alfacariensis* or *C.hyale* in this geographical area is not a matter of identifying individual imagos. It is a question of detailed knowledge of habitat in the distribution area and observation of behaviour and appearance of colonies of butterflies moving within that structure. Ultimately, rearing from egg to imago is essential in order to remove any possible doubt. However, it is satisfying to note that the ecological theories had already provided substantial evidence towards correct identification.

### Footnote:

(1) Bearing in mind the widespread distribution of the larval host plants of *C.hyale*, it is assumed that in the Rhône département it is an ecological requirement for the butterfly to exist in the relatively cooler climate at altitudes mostly above 500m.

### References:

**Lafranchis, T., 2000** - *Les papillons de jour de France, Belgique et Luxembourg et leurs chenilles*. Collection Parthénope, Editions Biotope, Mèze (France). 448p.

**Timothy Cowles**     [timothy.cowles@wanadoo.fr](mailto:timothy.cowles@wanadoo.fr)

The patience and diligence of this study is greatly to be commended – **Editor**.

## ***Identification of Pyrgus species based on external markings***

For the past few years data has been collected in an attempt to provide a framework for the identification of European Pyrgus species (specifically those 14 that occur in France) based solely on markings, avoiding the need for capture and examination of genitalia, and the accompanying distress and possible damage that may be caused.

I stress that I have no problem with serious scientific studies that need to identify the species definitively using genitalia examination, but I strongly disagree with this as a means for the enthusiast to identify specimens solely for their own interest.

I have tried to determine which markings are characteristic and reliably consistent and have concluded that a combination of markings is often needed, especially if a view of only one surface has been possible. This is particularly true of the underside markings, although much less useful for the upperside view alone, as several species are at least superficially similar and variation seems to be much greater.

However, if a view of both surfaces has been possible (and a decent photograph of both is probably necessary), I believe that near 100% confidence levels can be achieved. Where some residual doubt may persist, factors such as location, altitude, flight period may resolve that doubt.

The general findings were put on the internet a couple of years ago:  
[http://www.butterfliesoffrance.com/Pyrgus\\_identification.htm](http://www.butterfliesoffrance.com/Pyrgus_identification.htm)

Since then, prompted by Simon Spencer, I have tried to produce a step-by-step “key” for both the uppersides and undersides. These can be found here:

[http://www.butterfliesoffrance.com/Pyrgus\\_key\\_uppersides.htm](http://www.butterfliesoffrance.com/Pyrgus_key_uppersides.htm)

[http://www.butterfliesoffrance.com/Pyrgus\\_key\\_undersides.htm](http://www.butterfliesoffrance.com/Pyrgus_key_undersides.htm)

The uppersides key is not entirely convincing in several areas, but in combination with the undersides, as previously mentioned, should facilitate confident identification in most cases.

Regional variations and subspecies have not been included as yet. It is very much a work in progress and any comments on the criteria would be welcome, as well as comments on whether it works (or not) with known specimens.

## **Roger Gibbons**

I will be studying these in detail this season and including printouts in my field guide. A big thank you to Roger for this excellent resource – **Editor**.

## ***Supporting the development of a butterfly monitoring scheme in Romania***



**Participants taking part in the workshop**

Having made some initial contacts in the summer of 2012, and sounded out several key players in the world of Romanian Lepidoptera, we arranged a two-day butterfly transect training

workshop in Sighisoara, Transilvania, in November. The aim was to introduce the concept and value of butterfly monitoring, and to try and initiate transect walking in a country that has some of the most important lowland grasslands for butterflies (and biodiversity generally) in Europe. The workshop was supported by an EU grant to BC Europe and EFNCP. In advance of the workshop Jacqui and Kuno Martini had arranged the translation into Romanian of the new BC Europe transect manual (<http://www.bc-europe.eu/index.php?id=339>).

A variety of participants from all parts of Romania took part in the workshop, 25 in all, and we were very ably assisted by Dr Martin Wiemers of the German research organisation, UFZ. About one third of the participants were not experienced at all in butterfly identification - but interestingly, they were some of the keenest! An action plan was agreed and report produced.

We are very keen to sustain the momentum generated by the workshop and have kept in contact with the participants since, providing encouragement and support. We are also maintaining a temporary google website (<https://sites.google.com/site/monitorizareafuturilor/home>), where Jacqui has posted translations of the recording forms.

On-site training in 2013 was requested at the workshop and we promised to investigate the possibility of providing this, taking into account our own work commitments and subject to funding. We are very pleased and grateful that the EIG has offered funding towards the project in 2013.

Progress by the participants with their respective actions since the workshop has been patchy, which is perhaps to be expected. However, two actions which are underway are a Facebook page for Butterfly Monitoring Romania (or possibly Butterfly Conservation, Romania), which will include species photos and identification tips, due for launch in March, and a 'Butterfly Camp' in the Piatra Craiului National Park near Brasov, which will involve transect walkers, students and school children in butterfly identification and survey, and monitoring methods. The organiser of the Camp has already raised 1000€ from friends to support it.

An exciting development is that Jacqui has been invited by Professor Rakosy (Romania's leading lepidopterist) to speak at the annual meeting of the Romanian Lepidoptera Society at Cluj in April. She will also be providing transect training the day after to students and others from the Cluj area. Jacqui also spoke about the project at the annual German butterfly conference in Leipzig in early March, and it is likely that the German Society for Butterfly Protection will offer some funding to support the training project in 2013.

This summer Jacqui will be continuing her PhD studies on landscape-scale butterfly ecology in Transilvania. Paul will be assisting for three weeks in late May/early June, and we will be providing two days of transect training in mid May before fieldwork starts for Pogany-Havas (<http://www.treasuresoftransylvania.org/>), a rural development NGO (which is supported by Barbara Knowles, who attended the workshop) in eastern Transilvania. Jacqui also plans to attend the Butterfly Camp in the second week of July, and we also want to work with our new transect walkers and more experienced butterfly fieldworkers to produce more guidance, especially identification, and regional butterfly lists.

We anticipate that by the end of the season we will be able to enter monitoring data into the BC Europe transect database, and that some of this data will feed straight away into the BC Europe

grassland indicator. We also hope to arrange another November meeting to review progress and see what additional support may be needed in the future.

In summary, we are extremely pleased with the progress to date, from a 'standing start'. Initially some strong reservations and negative attitudes were expressed in some quarters of Romania, especially in the use of volunteers to undertake monitoring. (We think that setting up this project as volunteers ourselves has helped). With more support, guidance and confidence building, we anticipate that, by the end of the year, we will have at least eight transects up and running, but more than that, we hope that we will have the beginnings of a network of enthusiasts who will sustain and build a butterfly monitoring scheme in this beautiful, friendly and incredibly rich country.

**Jacqueline Loos & Paul Kirkland**

### ***Malpensa Airport***

Martin Davies and Mike Prentice helped survey a site near Malpensa (Milan) Airport for the European endangered False Ringlet *Coenonympha oedippus* last summer (see EIG12) with our Italian BCE partner Simona Bonelli. This site is now threatened by expansion of the airport and EIG have assisted in getting BCE chairman Miguel Munguira and BC CEO Martin Warren to write to the Italian minister responsible saying the site should be designated as an SAC (Special Area of Conservation).

### ***Requests for Information and Assistance***

#### **Parasitoids**

For those of you who rear larvae of Lepidoptera:

Mark Shaw (markshaw@xenarcha.com) is interested in hymenopterous parasitoids of butterflies and would like to hear from anyone who rears them (especially from the less commonly reared hosts), and will be happy to undertake determinations.

Hans-Peter Tschorsnig (hanspeter.tschorsnig@smns-bw.de) is interested in reared European tachinids and they can be sent to him for identification: Staatliches Museum für Naturkunde, Rosenstein 1, 70191 Stuttgart, Germany.

#### **Help wanted on BCE Butterfly Project in Spain**

Miguel Munguira is looking for help with a BCE Butterfly Project in Spain. His plans for fieldwork for year 2013 in relation to the project financed by MAVVA to study 4 endangered endemic butterflies in Spain are below. The dates are only approximate and particularly in the spring depend on weather, but this note is just to give an idea of what his intentions are. The

invitation is open to all EIG members. Neil Thompson and Hugo Brooke participated in 2012 fieldwork (see EIG12) and had a very enjoyable time. Miguel says collaboration with EIG was really useful in the framework of the project and thanks us very much indeed for our assistance with this! Several people are going this summer.

He would like to highlight one of the tasks - the work in the Betic Sierras (Jaén, Granada, Murcia and Albacete provinces) with *Polyommatus violetae*. This area is very rich in butterflies and includes beautiful landscapes like Sierra de Cazorla, Sierra Sagra and Sierra de Alcaraz. The area also gives some feeling of remoteness as there are few towns and low human population over a huge area. His intention is to explore the whole area to find new populations of *violetae* and count adults in those we already know. Some records are rather old and confirmation of presence would also be highly valued.

### **BCE PROJECT MAVA, FIELDWORK 2013**

24-30 JUNE/ 1-7 JULY: Adult populations of *Agriades zullichi* in Sierra Nevada (Andalusia).

8-14 JULY / 15-21 JULY: *Polyommatus golgus* populations in La Sagra and Sierra Nevada areas (Andalusia).

15-21 JULY / 22-28 JULY: *Polyommatus violetae*. Adult populations in Almirajara, Tejada & Sierra Nevada (Andalusia). Explore and sample new & known populations in the provinces of Jaén, Albacete, Granada & Murcia (Andalusia, Castilla-La Mancha and Murcia regions).

Contact Miguel López Munguira [munguira@uam.es](mailto:munguira@uam.es) and cc Simon Spencer [cerisyi@btinternet.com](mailto:cerisyi@btinternet.com)

### **Request for help with Butterfly Surveys in Swedish Mountains**

We have been in correspondence with some butterfly people in Sweden including Lars Pettersson at the Swedish Butterfly Monitoring Scheme ([lars.pettersson@biol.lu.se](mailto:lars.pettersson@biol.lu.se)) and Pavel Bina at the Swedish Species Information Centre ([pavel.bina@slu.se](mailto:pavel.bina@slu.se)) who would like help with butterfly surveys in the remoter mountain areas of Sweden. Some of the mountains such as those near Abisko are very well studied but others much less studied. There are several species of butterfly confined to Arctic Scandinavia. For details see EIG9 now downloadable from [www.bc-eig.org.uk](http://www.bc-eig.org.uk) website. Butterfly flying in remote Swedish mountains is not for the faint hearted. This is some of the wildest country in Europe. The mosquitoes are terrible and the bogs are dangerous. Head nets, wellies and gloves essential! You need a party of at least 2 preferably 3. The worst danger is that you will be confined to an expensive Swedish hotel drinking weak beer at ridiculous prices whilst it rains continuously outside. The best advice is to wait for a weather 'window', and book a last minute flight. The season is short - June & July. There are flights available to several airports along the Swedish mountains. But you will probably have to change somewhere.

[http://en.wikipedia.org/wiki/Arvidsjaur\\_Airport](http://en.wikipedia.org/wiki/Arvidsjaur_Airport)[http://en.wikipedia.org/wiki/Hemavan\\_Airport](http://en.wikipedia.org/wiki/Hemavan_Airport)

[http://en.wikipedia.org/wiki/Mo\\_i\\_Rana\\_Airport](http://en.wikipedia.org/wiki/Mo_i_Rana_Airport) (in Norway)

[http://en.wikipedia.org/wiki/Sveg\\_Airport](http://en.wikipedia.org/wiki/Sveg_Airport)

[http://en.wikipedia.org/wiki/Vilhelmina\\_Airport](http://en.wikipedia.org/wiki/Vilhelmina_Airport)

[http://sv.wikipedia.org/wiki/Kiruna\\_Airport](http://sv.wikipedia.org/wiki/Kiruna_Airport)

[http://en.wikipedia.org/wiki/%C3%85re\\_%C3%96stersund\\_Airport](http://en.wikipedia.org/wiki/%C3%85re_%C3%96stersund_Airport)

[http://en.wikipedia.org/wiki/Trondheim\\_Airport](http://en.wikipedia.org/wiki/Trondheim_Airport)

If you are interested then contact Lars and/or Pavel and they will suggest a few places to visit. There are mountain huts that can be used in the remoter places. This is likely to be a long term commitment of EIG and we might think of buying some 'kit' such as a tent to be left in Sweden.

## **Epirus**

We are responding to a request from Rika Bisa who some of you will remember from the EIG trip to Mt Chelmos to do butterfly surveys in Lakmos and Tzoumerka National Park near Ioannina in NW Greece (Epirus). John Salmon [john\\_salmon@btinternet.com](mailto:john_salmon@btinternet.com) who has been on both the Chelmos EIG trip and the 2012 Mt Orvilos trip is keen to take up this challenge and will lead a small EIG group there this summer from 2<sup>nd</sup> to 9<sup>th</sup> of July. Lazaros Pamperis will also join the trip. They will stay in Metsovo and Pravanta. The best way to get there is a flight to Corfu and ferry to Igoumenitsa. Epirus is an area very rich in butterflies. Please contact John if you are interested in joining him with a cc to me Simon Spencer. John speaks good Greek which can be very useful and like all EIG expeditions having several people with good ID skills is very informative for everybody. Anyone planning to visit that area anyway should also contact Rika Bisa ([bisarika@hotmail.com](mailto:bisarika@hotmail.com)).

## **This is a call for help for more recordings for two départements of the Midi-Pyrenees for the forthcoming Butterfly Atlas France**

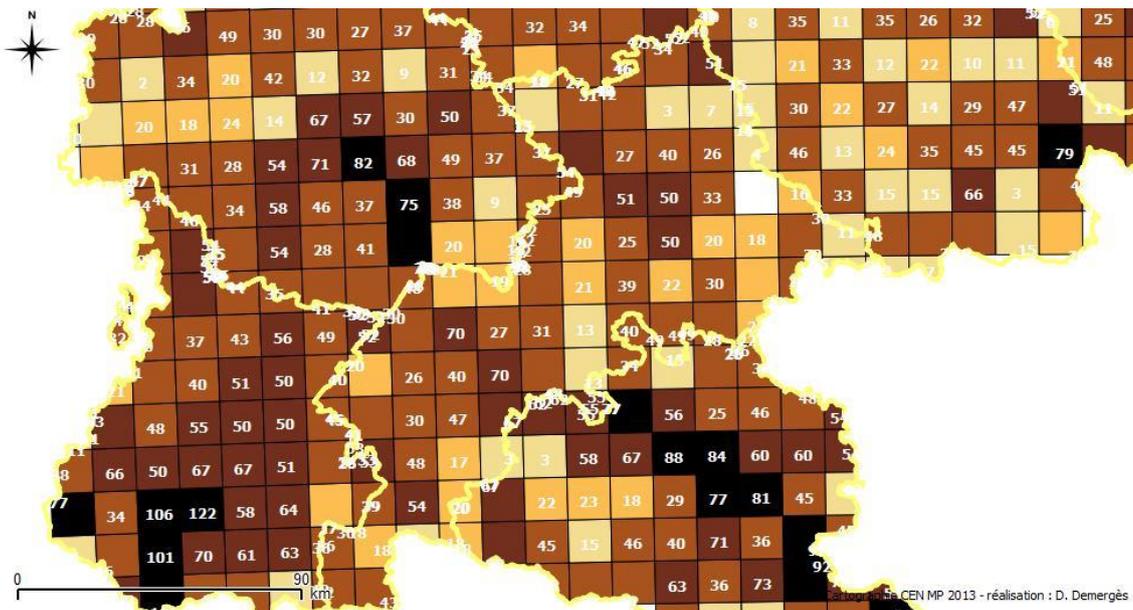
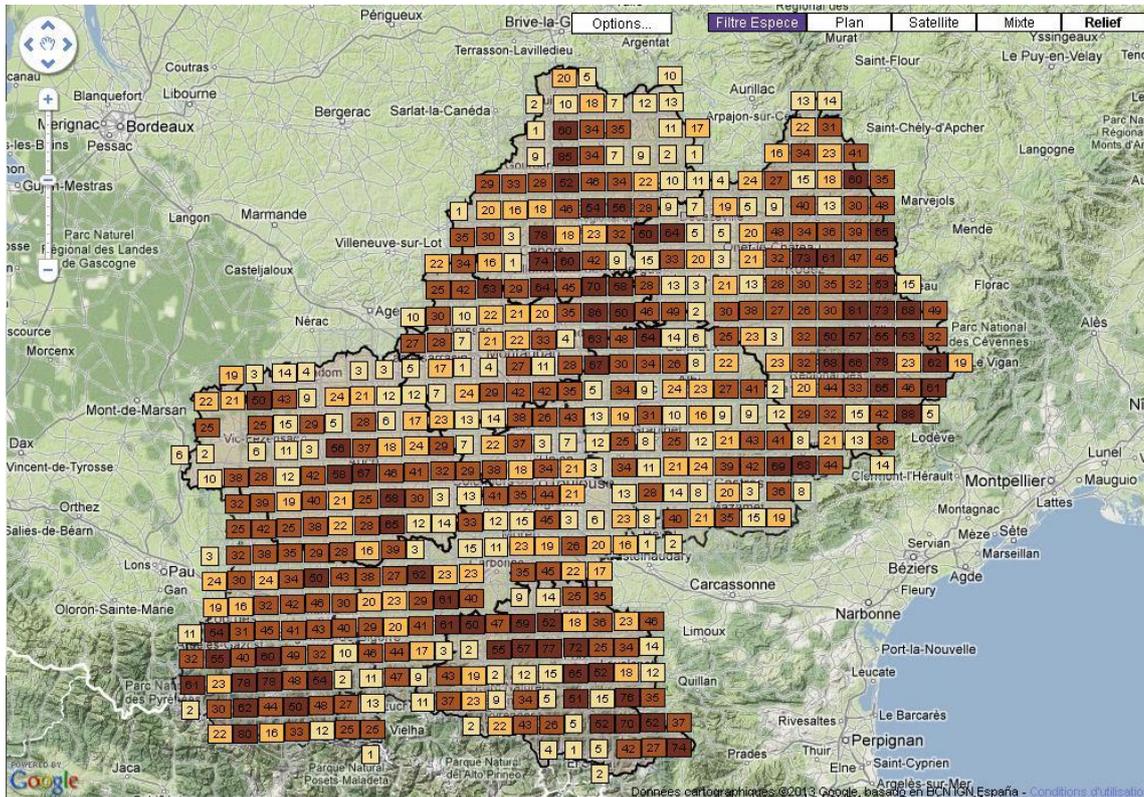
2013 is the last year for collecting field data towards the atlas for butterflies and day-flying moths of the Midi-Pyrénées.

The Haute-Garonne and the Tarn, despite a large pool of naturalists and a rich and varied habitat, are the départements where the least data has been collected. The départemental capital of the Haute-Garonne is Toulouse and for the Tarn it is Albi.

A little more than 5000 records have been collected for these two départements (against, for example, more than 15,000 in the Aveyron and the Hautes-Pyrenees).

However, there is still a year to increase this figure and develop a better understanding of the butterflies and day flying moths of these départements.

The first map below shows the number of species that have been recorded in the Midi-Pyrénées as a whole. It was last updated at the end of 2012.



The second map above is by David Demerges of the CEN (Conservatoire d'espèces naturelles - Midi-Pyrénées) who is co-ordinating the project and is focused on the Haute-Garonne. It was last updated in February 2013.

The paler boxes are those where the least number of species have been recorded.

Additional information is particularly sought for any of the areas where 15 species or less have been recorded.

The link to the CEN Midi-Pyrénées interactive map showing species information:

[www.kfeescom.accountsupport.com/CREN-MP/site/cartes/atlas/](http://www.kfeescom.accountsupport.com/CREN-MP/site/cartes/atlas/)

Should any EIG members have records in their notebooks that they wish to share they can enter them on the database for Nature Midi-Pyrénées.

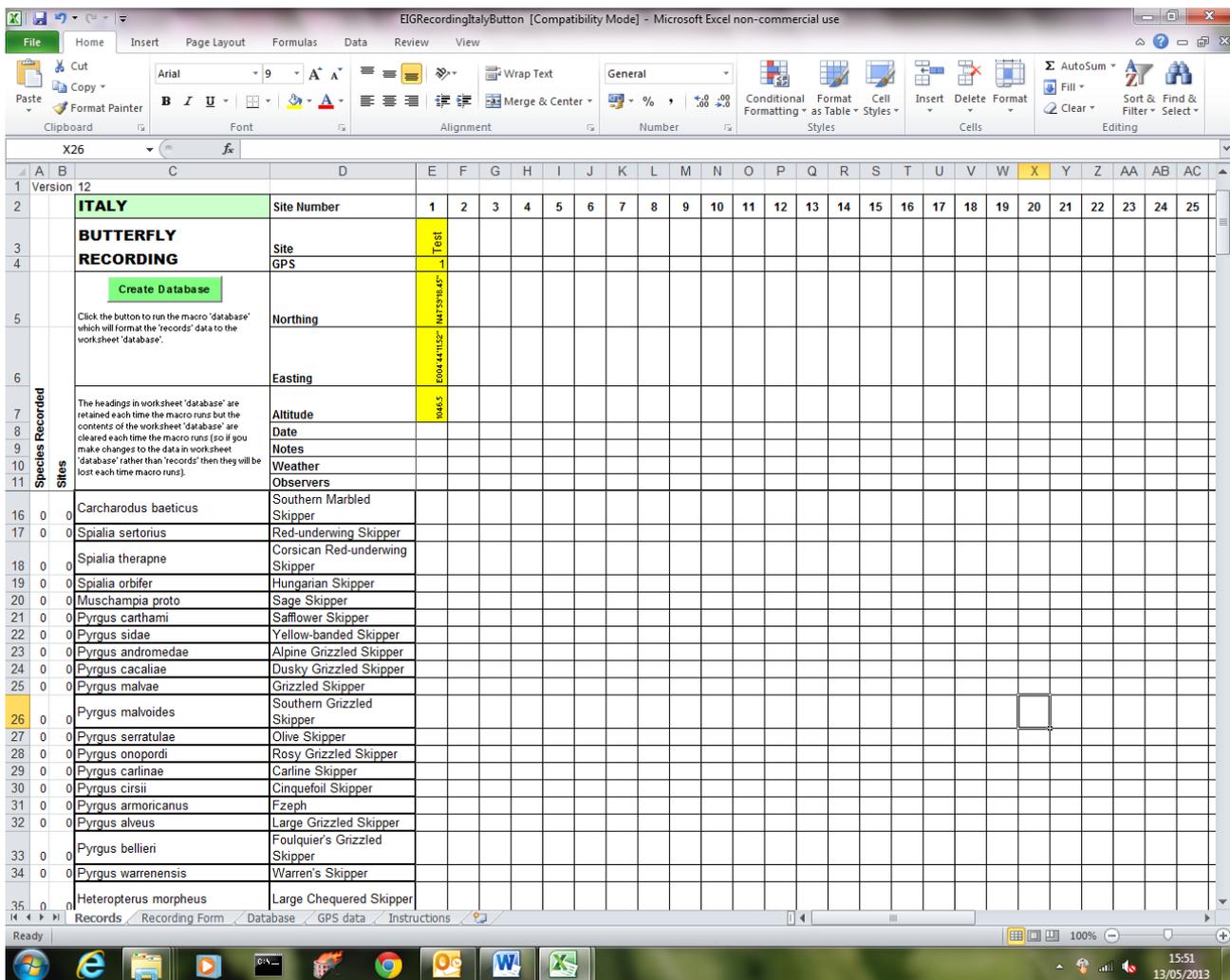
Link here: [www.baznat.net](http://www.baznat.net) (you need to request a login code) or enter on a pre-prepared Excel spreadsheet with the help of Géoportail for David Demerges at the CEN. Please contact me for supplementary information. [jude.lock@orange.fr](mailto:jude.lock@orange.fr)

If anyone is planning to visit either of the above departments this year then again any information would be gratefully received.

# EIG Recording Forms

On the EIG website [www.bc-eig.org.uk](http://www.bc-eig.org.uk) you will now find a number of EIG Recording Forms for specific countries for example see **EIGRecordingFormItaly.xls**. This is an Excel 97-2003 Worksheet. To run it properly you need Microsoft Excel.

For a start it provides a species list of butterflies for a given country, in this case Italy. It is laid out as several pages or worksheets which are accessed by the named tabs along the bottom. The pages are **Records, Recording Form, Database, GPS Data and Instructions**. The species list is in Records see below. The first column is the Latin name and the second column is the English name. There are 260 species for Italy and we have put them in a standard taxonomic order. The page scrolls down but keeps the headings and the two Species columns are always on the left.



This is where you can put your data. You fill this in BEFORE you have a beer when you get back to the hotel. At the top of each column there are several column headings:- Site Number, Site (for a location name), GPS (for a waymark – more of this later), Northing and Easting for the GPS coordinates, Date, Notes, Weather and Observers. So for each site and each date you can put an entry for each butterfly you see in the intersecting cell. The entry can be text or a number. You get an automatic count of species recorded and sites/dates for that species.

We suggest the content of each cell on the recording form is free format but we suggest Nominal abundance in an hour

A	1
B	2-10
C	11-30
D	31-100
E	101-1000
F	>1000
123	123 adults counted
+	Present
?	Query. ID not completely established
G2	Genitalia of 2 males observed
L	Larvae present
P	Pupa present
O	Ova present
O54	54 Ova counted
0	None Seen

But you can use anything you like and there is no length restriction.

There is another useful bit which you will probably use first, the **Recording Form**. This is on the second Tab so if you click on recording form you will get a printable recording form that for countries like Italy needs to be printed as two pages on either side of a sheet of A4. Print some of these off before you leave home and fill them in in the field. Use one form for each site/date.

Each species on the recording form is a formula which refers back to the Records page. If you are going to modify it then make any changes on the Records sheet. If you need to insert a line it is best to copy the entire table elsewhere, modify it and copy it back on the Recording form and the Records sheet won't match up. The clever bit is the Macro written by the new EIG webmaster Mike Haigh. If you click on the button 'create database' it will run this macro and for each cell for which you have made an entry in records it will output a row to the database sheet with the

<b>Species</b>	Left hand column A of that row
<b>English</b>	Left hand column B
<b>Abundance</b>	What you typed in for that cell
<b>Site Number</b>	Row 2 of that column
<b>Site</b>	Row 3 of that column
<b>GPS</b>	The waymark number in row 4 of that column
<b>Easting</b>	row 5 of that column
<b>Northing</b>	row 6 of that column
<b>Altitude</b>	row 7 of that column
<b>Date</b>	row 8 of that column
<b>Notes</b>	row 9 of that column
<b>Weather</b>	row 10 of that column
<b>Observers</b>	row 11 of that column
<b>Country</b>	Cell C2 of Records

**ITALY  
BUTTERFLY RECORDING**



<b>Site :</b>	<i>Colias palaeno</i>	Moorland Clouded Yellow
<b>GPS :</b>	<i>Colias crocea</i>	Clouded Yellow
<b>Date :</b>	<i>Colias hyale</i>	Pale Clouded Yellow
<b>Notes :</b>	<i>Colias alfaccariensis</i>	Berger's Clouded Yellow
<b>Weather :</b>	<i>Gonepteryx rhamni</i>	Brimstone
<b>Observers :</b>	<i>Gonepteryx cleopatra</i>	Cleopatra

<i>Erynnis tages</i>	Dingy Skipper	<i>Hamearis lucina</i>	Duke of Burgundy Fritillary
<i>Carcharodus alceae</i>	Mallow Skipper	<i>Lycaena phlaeas</i>	Small Copper
<i>Carcharodus lavatherae</i>	Marbled Skipper	<i>Lycaena dispar</i>	Large Copper
<i>Carcharodus flocciferus</i>	Tufted Skipper	<i>Lycaena virgaureae</i>	Scarce Copper
<i>Carcharodus baeticus</i>	Southern Marbled Skipper	<i>Lycaena tityrus</i>	Sooty Copper
<i>Spialia sertorius</i>	Red-underwing Skipper	<i>Lycaena tityrus subalpinus</i>	Sooty Copper
<i>Spialia therapne</i>	Corsican Red-underwing Skipper	<i>Lycaena alciphron</i>	Purple-shot Copper
<i>Spialia orbifer</i>	Hungarian Skipper	<i>Lycaena hippothoe</i>	Purple-edged Copper
<i>Muschampia proto</i>	Sage Skipper	<i>Lycaena thersamon</i>	Lesser Fiery Copper
<i>Pyrgus carthami</i>	Safflower Skipper	<i>Thecla betulae</i>	Brown Hairstreak
<i>Pyrgus sidae</i>	Yellow-banded Skipper	<i>Favonius quercus</i>	Purple Hairstreak
<i>Pyrgus andromedae</i>	Alpine Grizzled Skipper	<i>Callophrys rubi</i>	Green Hairstreak
<i>Pyrgus cacaliae</i>	Dusky Grizzled Skipper	<i>Satyrrium w-album</i>	White-letter Hairstreak
<i>Pyrgus malvae</i>	Grizzled Skipper	<i>Satyrrium pruni</i>	Black Hairstreak
<i>Pyrgus malvoides</i>	Southern Grizzled Skipper	<i>Satyrrium spini</i>	Blue-spot Hairstreak
<i>Pyrgus serratulae</i>	Olive Skipper	<i>Satyrrium ilicis</i>	Ilex Hairstreak
<i>Pyrgus onopordi</i>	Rosy Grizzled Skipper	<i>Satyrrium esculi</i>	False Ilex Hairstreak
<i>Pyrgus carlinae</i>	Carline Skipper	<i>Satyrrium acaciae</i>	Sloe Hairstreak
<i>Pyrgus cirsii</i>	Cinquefoil Skipper	<i>Lampides boeticus</i>	Long-tailed Blue
<i>Pyrgus armoricanus</i>	Fzeph	<i>Leptotes pirithous</i>	Lang's Short-tailed Blue
<i>Pyrgus alveus</i>	Large Grizzled Skipper	<i>Cupido minimus</i>	Small Blue
<i>Pyrgus bellieri</i>	Foulquier's Grizzled Skipper	<i>Cupido osiris</i>	Osiris Blue
<i>Pyrgus warrenensis</i>	Warren's Skipper	<i>Cupido argiades</i>	Short-tailed Blue
<i>Heteropterus morpheus</i>	Large Chequered Skipper	<i>Cupido alcetas</i>	Provençal Short-tailed Blue
<i>Carterocephalus palaemon</i>	Chequered Skipper	<i>Celastrina argiolus</i>	Holly Blue
<i>Thymelicus lineola</i>	Essex Skipper	<i>Pseudophilotes baton</i>	Baton Blue
<i>Thymelicus sylvestris</i>	Small Skipper	<i>Pseudophilotes vicrama</i>	Eastern Baton Blue
<i>Thymelicus acteon</i>	Lullworth Skipper	<i>Pseudophilotes barbagiae</i>	Sardinian Blue
<i>Hesperia comma</i>	Silver-spotted Skipper	<i>Scolitantides orion</i>	Chequered Blue
<i>Ochlodes sylvanus</i>	Large Skipper	<i>Glaucopteryx alexis</i>	Green Underside Blue
<i>Gegenes pumilio</i>	Pigmy Skipper	<i>Glaucopteryx melanops</i>	Black-eyed Blue
<i>Gegenes nostrodamus</i>	Mediterranean Skipper	<i>Iolana iolas</i>	Iolas Blue
<i>Zerynthia polyxena</i>	Southern Festoon	<i>Phengaris arion</i>	Large Blue
<i>Parnassius mnemosyne</i>	Clouded Apollo	<i>Phengaris teleius</i>	Scarce Large Blue
<i>Parnassius phoebus</i>	Small Apollo	<i>Phengaris alcon</i>	Alcon Blue
<i>Parnassius apollo</i>	Apollo	<i>Phengaris alcon rebeli</i>	Mountain Alcon Blue
<i>Iphiclides podalirius</i>	Scarce Swallowtail	<i>Plebejus trappi</i>	Alpine Zephyr Blue
<i>Papilio machaon</i>	Swallowtail	<i>Plebejus argus</i>	Silver-studded Blue
<i>Papilio hospiton</i>	Corsican Swallowtail	<i>Plebejus idas</i>	Idas Blue
<i>Papilio alexanor</i>	Southern Swallowtail	<i>Plebejus argyrognomon</i>	Reverdin's Blue
<i>Leptidea sinapis complex</i>	Wood White	<i>Plebejus optilete</i>	Cranberry Blue
<i>Leptidea morsei</i>	Fenton's Wood White	<i>Plebejus glandon</i>	Glandon Blue
<i>Anthocharis cardamines</i>	Orange Tip	<i>Plebejus orbitulus</i>	Alpine Blue
<i>Anthocharis euphenoides</i>	Provence Orange Tip	<i>Aricia eumedon</i>	Geranium Argus
<i>Anthocharis damone</i>	Eastern Orange Tip	<i>Aricia cramera</i>	Southern Brown Argus
<i>Euchloe crameri</i>	Western Dappled White	<i>Aricia agestis</i>	Brown Argus
<i>Euchloe simplonia</i>	Mountain Dappled White	<i>Aricia artaxerxes</i>	Mountain Argus
<i>Euchloe ausonia</i>	Eastern Dappled White	<i>Aricia nicias</i>	Silvery Argus
<i>Euchloe tagis</i>	Portuguese Dappled White	<i>Cyaniris semiargus</i>	Mazarine Blue
<i>Euchloe insularis</i>	Corsican Dappled White	<i>Polyommatus escheri</i>	Escher's Blue
<i>Aporia crataegi</i>	Black-veined white	<i>Polyommatus dorylas</i>	Turquoise Blue
<i>Pieris brassicae</i>	Large White	<i>Polyommatus amandus</i>	Amanda's Blue
<i>Pieris manni</i>	Southern Small White	<i>Polyommatus thersites</i>	Chapman's Blue
<i>Pieris rapae</i>	Small White	<i>Polyommatus icarus</i>	Common Blue

<i>Pieris ergane</i>	Mountain Small White	<i>Polyommatus eros</i>	Eros Blue
<i>Pieris napi</i>	Green-veined White	<i>Polyommatus daphnis</i>	Meleager's Blue
<i>Pieris bryoniae</i>	Mountain Green-veined White	<i>Polyommatus bellargus</i>	Adonis Blue
<i>Pontia callidice</i>	Peak White	<i>Polyommatus coridon</i>	Chalkhill Blue
<i>Pontia daplidice</i>	Bath White	<i>Polyommatus hispanus</i>	Provence Chalkhill Blue
<i>Colias phicomone</i>	Mountain Clouded Yellow	<i>Polyommatus humedasmae</i>	Piedmont Anomalous Blue

You can run the macro as often as you like and it just overwrites what was there before. The joy of this is that one row per record spreadsheets are easy to incorporate into existing datasets including your own life list from different trips. Copy and paste the data into your master list.

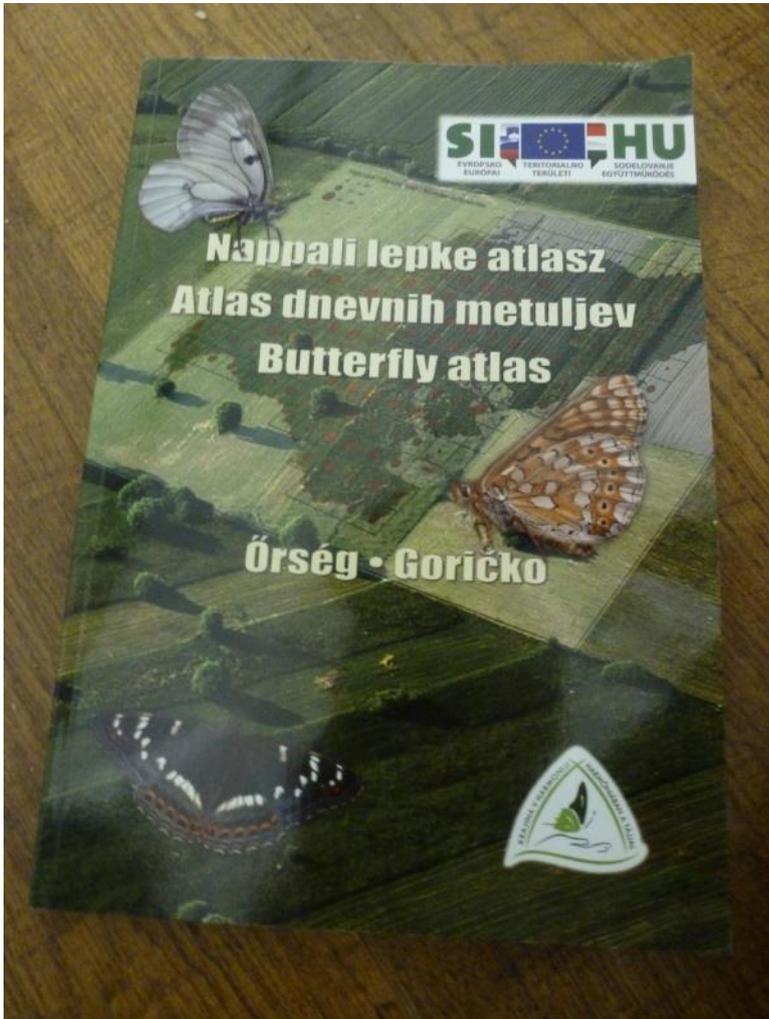
Where possible in the instructions page there is an email address of someone in that country who either organises local recording such as a national atlas or who would like your data. For countries with several regional schemes we might give several email addresses. PLEASE SEND THEM COPIES OF YOUR COMPLETED SPREADSHEETS by attaching the file to an email. Expect to get a few queries and demands for photographs but that should be normal. Your data will then go towards the national record set and will be used for future national atlases.

Those of you who use a GPS regularly often use the free programme GPSUTILITY (<http://www.gpsu.co.uk>) to download waypoints from a GPS using a cable that usually must be purchased as an 'extra'. If the waypoints are pasted as an excel file into the cell A2 on the tab GPS DATA then if the waymark is entered into the GPS row 4 of records, the formulae VLOOKUP will look up the waymark in the Waypoints table and fill in the Eastings and Northings as well as Altitude automatically. This saves typing and is less likely to introduce errors.

If there is an EIG member with a good knowledge of GPS then I would welcome an article for the EIG newsletter. I find GPS extremely useful and use it all the time. Just waymarking the car in the airport car park can save time. It is also a safety feature in that you are less likely to get lost.

## Book Reviews

### Butterfly Atlas for the Orseg National Park



I am sure you will be pleased to hear that the Butterfly Atlas for the Orseg National Park in western Hungary has now been published. It is in full colour, extends to almost 250 pages, covers the adjoining Goricko national park in Slovenia and is a very impressive piece of work by Szabolics Safian and other colleagues. The atlas would not have been completed nor its coverage so complete without the assistance of the many volunteers who came to help from the UK and elsewhere in Europe including several EIG expeditions. It is not priced and not really available for sale but EIG has a copy which people can examine at EIG AGMs or by arrangement.

**Mike Williams**

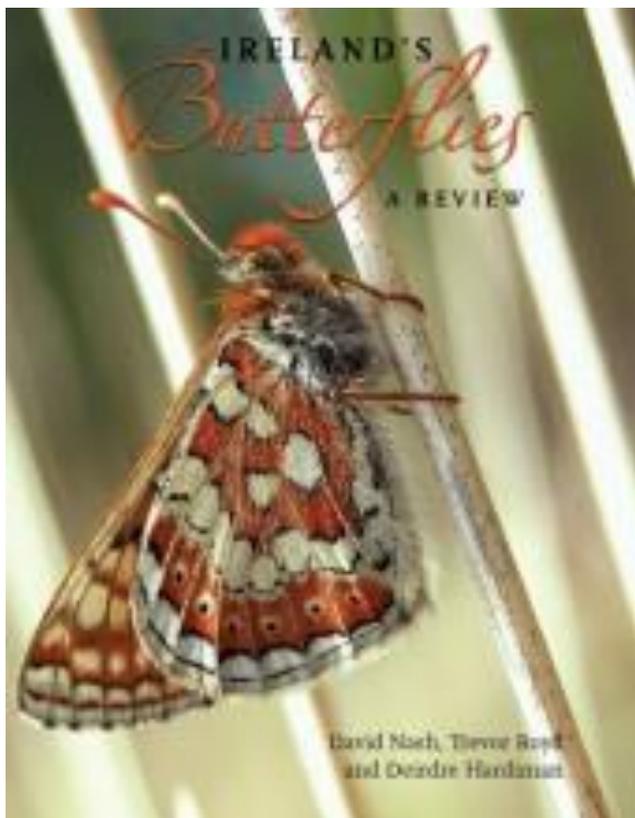
**Ireland's Butterflies / A Review** by David Nash, Deirdre Hardiman and Trevor Dempster Boyd (£16) published by The Dublin Naturalists' Field Club.

The authors received information from several hundred recorders during their coordination of butterfly recording during a fifteen year survey period (1995-2009) of all the butterflies of Ireland. The data collected has provided unique detail on the distribution of Irish butterflies and on when and where they may be seen. The book contains some 350 photographs, drawings, maps and charts. All thirty four species of butterfly regularly seen in Ireland with their eggs, larvae and pupae are described including rarer vagrant butterflies.

The various chapters include a history of the study of butterflies in Ireland, geology, soils and climate, conservation, gardening for butterflies, species accounts, sites of interest and a number of appendices with supplementary information including a bibliography. This makes it the definitive work on Ireland's Butterflies. Unique to this publication is the chapter on *The Butterfly as an Insect* which illustrates and details the behaviour, function and form of the butterfly which is superbly illustrated and not something normally found in butterfly books.

The losses of bog and semi-natural habitat are a major cause of concern for this fascinating aspect of Ireland's heritage. There are eight species of butterfly on the Northern Ireland (UK) Priority List, whereas in the Republic of Ireland the only legally protected species is the Marsh Fritillary which is designated as a consequence of the Bern Convention and the Habitat Directives. There are interesting stories here about island biogeography. Why are there only 34 species whereas Britain has 56, and the recent arrival of new species the Comma (*Polygonia c-album*) and the Essex Skipper (*Thymelicus lineola*) are particularly interesting. The information on Wood Whites *Leptidea sinapis* and *Leptidea juvernica* will be of particular interest to British visitors.

Both The Dublin Naturalists' Field Club and Butterfly Conservation (NI) are continuing their recording schemes for Ireland's butterflies.



## **Butterflies of Caucasus**

Vadim Tshikolovets has just published a new book "The Butterflies of Caucasus and Transcaucasia". For information you'll find on the site:

<https://sites.google.com/site/tshikolovetsbooks>

Apparently it costs £128.

## ***Supplement***

***Euchloe bazae*** (Spanish Greenish Black-tip) by Bernard Watts as pdf.

This is an extract from Bernard's European Butterflies - a Portrait in Photographs. Bernard has just published his chapters on the Pieridae.

**Butterfly Conservation is a Charity registered in England & Wales (254937)  
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