

**Butterfly Conservation Europe
Activity report 2016**



Butterfly
CONSERVATION EUROPE

Butterfly Conservation Europe Activity Report 2016



Photo: Chris van Swaay

Butterfly Conservation Europe Activity Report 2016



Authors

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March 2017



Some of the BCE board and advisors, Lulworth UK, November 2016. From left to right: Chris van Swaay (chair), Irma Wijnhoff (advisor), Lars Pettersson, Miguel Munguira, Rudi Verovnik, Sue Collins (Policy Director), Martin Warren (Head of Development), Dirk Maes (advisor), Mike Prentice (EIG), Martina Sasic, Paul Kirkland (secretary).

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Introduction

Butterfly Conservation Europe was started in November 2004 in a collaboration between Butterfly Conservation (UK), Dutch Butterfly Conservation and several other countries. BC Europe acts as an umbrella organisation both to stimulate and co-ordinate conservation action for butterflies, moths and their habitats across Europe.

For BCE butterfly monitoring has always been one of the major pillars of our work. 2016 marks the start of an exciting development. With the eBMS we hope to bring all butterfly counts in Europe together, making research and conservation much easier. To achieve this we work together with the Centre of Ecology and Hydrology (CEH) in the UK.

As BCE is now twelve years old (we were founded in 2004), the two last of the founding board members had to be replaced on the board. Martin Warren and Dirk Maes have been very important in the conservation of butterflies in the UK and Belgium as well as in the whole of Europe. Martin was the first chair of BCE, and Dirk was our treasurer for the full twelve years. We can only say thank you for all you have done! We are very glad that Dirk will stay with BCE as advisor and Martin will continue as Head of Development (see below). We welcome Paul Kirkland and Lars Pettersson as new board members.

Although I have been involved in Butterfly Conservation Europe since the start as an advisor, I only joined the board of BCE in 2016 replacing Titia Wolterbeek on behalf of Dutch Butterfly Conservation. I feel honoured to be elected as Chair following Miguel Munguira.

Miguel has done a great job in working on the conservation of butterflies. One of his major achievements is the publication of the species action plans for four threatened and endemic Spanish butterflies. An important step for the conservation of those species.

In 2017 we plan to organise a new partner meeting. We look forward to welcome you all in Laufen (Germany) again to exchange experiences and knowledge on the conservation of our European butterflies.

I wish you all a very successful year.

Chris van Swaay
Chair BC Europe



Next partner meeting in Laufen 2017

The next BC Europe Partner meeting will be held at Laufen in Germany from Wednesday 29th November to Saturday 2nd December 2017. The theme of the meeting will be recording and monitoring butterflies across Europe. We will have presentations on the new pan European Butterfly Monitoring Scheme (see below) and the latest results

from some long running monitoring schemes. There will also be a workshop to discuss how to mobilise butterfly records for use in conservation and research as well as discussions on influencing European policies and opportunities for partners to exchange information.



Email invitations have already been sent to all our Partner contacts but if you did not receive one or would like to attend please contact

martin.warren@bc-europe.eu. A second announcement and programme will be sent later in the year.

Developing BC Europe

By Martin Warren, Head of Development, BC Europe

I am delighted to take on a new role as part-time Head of Development for BC Europe. The post is funded one day per week by BC (UK) following my retirement as their Chief Executive last year. I am very aware that this is a large job and may well take up more than one day a week!

The aim of the post is to help develop BC Europe and its partners by encouraging communication, co-ordinating effort, fundraising for projects, organising partner meetings, updating the website, and supporting partners especially in conservation action and monitoring. We have developed a special blog page on the BC Europe website

for partners to share information on their work, or to give opinions on conservation topics. If anyone would like to write a blog (500-1000 words) please contact me at martin.warren@bc-europe.eu



Policy development and advocacy during 2016

By Sue Collins, European Environmental Policy Advisor, summarises her work on behalf of BC Europe and the European Habitats Forum

1. During 2016 I have continued to advocate to DG Environment, the EEA and MEPs in the EU Parliament for support for butterfly monitoring, reporting and indicator development. Some support for updating the Grassland Butterfly Indicator was forthcoming in 2016 and discussions with MEPs are ongoing. I participated, with BCE colleagues, in the International symposium “Future 4 Butterflies II” in March and had various discussions in the margins to encourage BCE Partners to start walking transects and explore the possibility of setting up butterfly monitoring schemes in those countries where there is no monitoring scheme at present.

2. The improved implementation of CAP 2013, to support the protection and sustainable management of semi natural grassland, has been a constant theme of dialogue in meetings with EU Member States’ Nature Directors and with the EU Commission, including in the EU Coordinating Group on Biodiversity and Nature (CGBN). NGOs

concluded that unless MSs changed their approach there was no chance of the EU reaching its Strategy Target 3 – to increase the contribution of Agriculture to biodiversity by 2020. Birdlife and EEB made a request to the EU Commission for a Fitness Check of the CAP.

3. At the informal meeting of EU Nature Directors in October the EU Co-Chair, Humberto Delgado Rosa, the Director of Natural Capital at DG Environment, accepted my proposal that he explore convening an informal meeting of Member States’ Nature and Agriculture Directors to give more leadership to the integration of biodiversity issues in agriculture policies. This was endorsed in the Nature Directors’ conclusions from the meeting. Given the highly political issue of CAP reform the need for more understanding and top level leadership on these issues is clear. This is vital as debates begin in 2017 on the approach to be taken in negotiating CAP 2020.

The Large Blue (Phengaris arion) is listed on the annexes of the Habitats Directive.





Butterflies need flower-rich semi-natural grasslands.

4. In March the main issues for discussion at CGBN included a newly tabled Road Map to improve implementation of the EU Biodiversity Strategy, in the light of the Mid Term Review, which had concluded that there was still a long way to go to achieve significant improvements in biodiversity and more Favourable Conservation Status for listed habitats and species of European importance. Most such butterflies are still in unfavourable condition.

5. In discussion of the Road Map at the following Nature Directors' meeting, I highlighted the importance of increasing financing for biodiversity as well as improving integration into agriculture and welcomed the intention to develop an EU Pollinator initiative and to bring forward a proposal for a Trans-European Green Infrastructure Network (TEN-G). As co-coordinator of the EHF Working Group on Green Infrastructure I discussed with fellow NGOs and with DG Environment how to achieve gains for biodiversity through a strategic TEN-G initiative.

6. In the Autumn I was re-elected as a Vice Chair of the European Habitats Forum (EHF) and was appointed to the Strategic Advisory Board for the EU EKLIPSE project, which is setting up a knowledge and learning mechanism on biodiversity and ecosystem services and aims to improve the links between Science, Policy and Society and so support better decision making.

7. Following a long campaign by NGOs and citizens across the EU and an EU "Fitness Check", actively supported by BC Europe, there was some excellent news in December that the EU Commission confirmed that the EU Nature Directives are fit for purpose. Moreover, they said that implementation of the Directives need strengthening, especially action on more effective enforcement, funding and sectoral integration to achieve the Directives' aims. Discussions on an Action Plan to achieve this are to take place early in 2017.

Developing a pan European Butterfly Monitoring Scheme

Report by Martin Warren

One of BC Europe's main goals is to collate monitoring data from across Europe to produce representative species trends and biodiversity indicators as well as to identify priorities for action and much, much more. For many years, we have collated trends on 17 widespread grassland species to produce a European Grassland Indicator (see below) which shows that a system of co-operation exists amongst the 22 countries which have existing monitoring schemes. However, until now, there have been no resources to collate a comprehensive database with complete data for all species that would allow the modern sophisticated analysis.

During the year we applied for funds to develop such a database and expand the monitoring network to make it truly representative of Europe as a whole. Sadly, this was not successful. At the same time, we discussed the possibilities with the Centre for Ecology and Hydrology who developed the UK Butterfly Monitoring Scheme and have the technical expertise to collate data at a European scale. The good news is that they have obtained some limited funding from the Natural Environment Research Council to begin to collate data from existing European schemes.

The project is run by David Roy (Head of Biological Recording) and Reto Schmucki (who has recently moved to CEH from Paris University). In association with BC Europe, they have helped form a pan European Butterfly Monitoring Scheme or eBMS for short (www.butterfly-monitoring.net/ebms). There are many issues to be resolved and discussions began at a monitoring workshop in April, linked to the Future of Butterflies conference hosted by Dutch BC in Wageningen.

We have also established a small Steering Group comprising the co-ordinators of five larger and longer running schemes (UK, Netherlands, Germany, Catalonia and Sweden). Led by David Roy at CEH, we have developed a data sharing agreement which was signed by the five schemes at the monitoring workshop. Data from the five schemes are now stored centrally and other schemes are being invited to join in as time and resources allow. Discussions are now well underway with France, Luxembourg, Belgium, Hungary and Spain.

Another major development is that CEH have developed a system for online data entry, based on the system used successfully in the UKBMS by over 2,000 recorders. The system can be accessed at www.butterfly-monitoring.net/mydata and is intended to facilitate new countries to join in easily, without the need for establishing a complex database. It is not intended to be used in countries that already has a butterfly monitoring scheme in place. The system would even allow individual recorders to enter data from countries with no current scheme. At present the site is mainly in English, but we hope in due course that it will be more fully translated into other languages as necessary.

If anyone would like to volunteer to do translations or has any queries about the eBMS or would like to join in, please contact Reto or David at EBMS@ceh.ac.uk

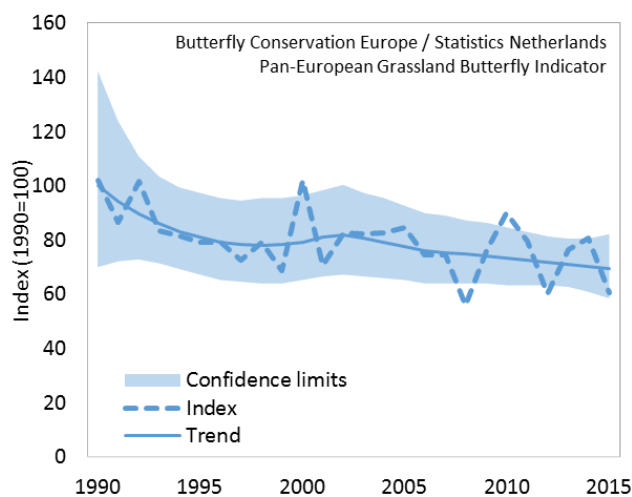
If anyone would like to discuss starting a monitoring scheme in a country without an existing scheme, please contact martin.warren@bc-europe.eu

Grassland Indicator update

Report by Chris van Swaay

In 2016 BCE produced the sixth version of the European Grassland Butterfly Indicator, one of the EU biodiversity indicators of the European Environment Agency (EEA). The indicator is based on more than 9200 transects in national Butterfly Monitoring Schemes covering 22 countries across Europe, most of them active in the European Union. In 2015, counts were made in more than 4500 transects.

The indicator shows that since 1990, grassland butterfly abundance has declined by 30%. The rate of loss has slowed in the last 5-10 years. Part of this slowing down might be caused by climate warming, as this favours cold-blooded animals like butterflies, thus masking the effects of intensification. In parts of Western Europe butterfly numbers outside nature reserves have come to an absolute minimum, meaning it is unlikely for the indicator to drop further.



The Pan-European Butterfly Indicator for Grassland species 1990-2015.

The indicator is based on Butterfly Monitoring Schemes in 22 European countries and seventeen characteristic grassland butterfly species.

The main driver of decline in grassland butterflies is the change in rural land use: agricultural intensification has increased where the land is relatively flat and easy to cultivate; and abandonment has occurred in recent years in mountains and wet areas, mainly in Eastern and Southern Europe. Agricultural intensification leads to uniform, almost sterile grasslands for biodiversity. Fertilisation reduces plant diversity (both host plants and nectar sources) and the cessation of haymaking in favour of more profitable silage regimes is particularly detrimental. Grassland butterflies thus mainly survive in traditionally farmed low input systems (High Nature Value Farmland) as well as nature reserves, and marginal land such as road verges and amenity areas.

The priority now is to halt further losses and support recovery. This can only come about with greater protection and more sustainable management of semi-natural grassland. For the conservation of grassland butterflies, priorities are to reduce the abandonment of grasslands and greater financial support for HNV farming needs to be a key goal of EU agriculture policy and reflected in the implementation and further development of the Common Agriculture policy. Member States can choose to identify, designate and protect "Environmentally Sensitive Grasslands" under the CAP 2013 reforms. This flexibility needs to be used by all Member States, both inside and outside Natura 2000 sites, to help prevent further losses of HNV grasslands and support restoration.

Butterflies offer the possibility to be used as a structural headline indicator, not only for grasslands, but also for other habitats and help evaluate agriculture policy and track the impacts of other pressures such as climate change. To facilitate this, Butterfly Conservation Europe (BCE) started a new initiative with the Centre for Ecology & Hydrology (CEH) during 2016 to develop a European Butterfly Monitoring Scheme (eBMS) and a single database containing all European monitoring data from which we could produce a range of indicators.

Butterflies belong to the few species groups for which Europe-wide monitoring is possible. Butterfly monitoring, the building of indicators on a regular basis and the further development of the European Butterfly Monitoring Scheme (eBMS) should be supported by the EU and its Member States. Butterfly monitoring has also taken off in Europe and there are now schemes in more than 25 countries, with Hungary, Slovakia and Serbia coming 'on stream' in 2016. There are now over 9000 transects across Europe, and discussions are currently taking place to include butterfly data into the global 'Living Planet Index', managed by WWF International and the Zoological Society of London (www.livingplanetindex.org).

Small Skipper (Thymelicus sylvestris).



Mobilising European butterfly distribution records

By Chris van Swaay and Martin Warren

One of BC Europe's main aims is to encourage recording of butterflies across Europe in order to provide information to underpin their conservation. Under a new project being funded by the Dutch node of the Global Biodiversity Information Facility (NLBIF), BCE is collaborating with Dutch BC to help mobilise existing butterfly records. During the two-year project we will explore what data exist in each country and how it might be shared more widely for use in conservation and research at a European and global level. We will also focus on gathering holiday records that may provide a rich source of information on underexplored areas but often do not get into national or international databases.

We are aware of concerns over access to national datasets, which have often been gathered under specific terms and conditions, but we hope to understand the obstacles better within the project. We will also try to gather as much holiday information as possible and make them available to national schemes and researchers via the GBIF website.

The project provides funding for us to discuss the topic at a special meeting of BC partners, which will be held at our usual venue at Laufen in Germany from 29 November to 2nd December, 2017. Invitations to this meeting were sent early in the year. If anyone would like to help the project, they can contact Chris at chris.vanswaay@vlinderstichting.nl



***Colias myrmidone*: Conserving the last populations of a threatened butterfly**

By Matthias Dolek and Jacqueline Loos

The Danube Clouded Yellow, *Colias myrmidone* (Esper, 1780) is one of the most threatened butterfly species in Europe. Being critically endangered, *C. myrmidone* is listed in the Annexes II and IV of the Habitats Directive of the European Union and conservation measures are urgent. After its extinction in most European countries, there are small populations left in Poland and Slovakia, but Romania is the only country in the European Union with some possibly large populations. It is the only species of invertebrate for which a European action plan has been developed (Marhoul & Dolek 2012). This action plan summarizes biological and ecological information on the species, discusses possible reasons for the decline and details necessary actions to preserve the species.

During recent years, our research and conservation activities followed these guidelines. As a major success, three new Natura 2000 sites were created by the Romanian government and set into force in January 2016. For all these three sites there

are recent observations of *C. myrmidone*, which enabled the Romanian government to create well-focused protected sites. However, knowledge gaps exist regarding the distribution and ecology of *C. myrmidone* in the protected sites. Moreover, not enough detail is known about the effect of different kinds of land management in the sites on *C. myrmidone* populations. In 2015 and 2016, we started collecting data on distribution of the butterfly beyond the usually visited spots and on breeding sites, and investigated their structural characteristics. As the sites are shaped by different kinds of traditional land-use, which are changing rapidly, we also started to make contact with local governments and local farmers in 2016. Our aim is to create a trusting relationship that will help find solutions for future land-use that supports the habitat structures needed by *C. myrmidone* and creates a suitable income for farmers and other local people. With this collaborative approach our contacts were so far very positive.



The food-plant of C. myrmidone, Chamaecytisus triflorus, flowering in April. It may grow to very different size probably depending on land-use.



Romanian colleagues discussing the fate of *C. myrmidone* after the site was planted with *Picea abies*.

Based on this work, we wrote a proposal for the Advisory Assistance Program of the German Federal Ministry for the Environment, which they considered as worth funding. It is, however, not settled if any funding will be available within the program. The project will cover some additional field work on the ecology of *C. myrmidone*, close contact to local administration and land-owners and land-users, finally providing recommendations for management prescriptions for the management plan of the Natura 2000 sites. These recommendations will be elaborated in a collaborative approach with land-users, land-owners and other stakeholders. If we will receive the grant, this will certainly be an ambitious work, but hopefully a very helpful approach for the conservation of *C. myrmidone*.

This work was made possible by the financial support of EIG – European Interest Group of Butterfly Conservation UK, ANL – Bavarian Academy for Nature Conservation and Landscape Management and through a starting grant within the excellence initiative at Goettingen University. A large number of people are involved in this work. Field-work was mainly carried out by Romanian colleagues (in 2016 I. Goia, C. Vizauer, A. Kastal, H. Hedrich), while other Romanian colleagues gave us other kinds of important support (e.g. L. Rakosy, F. Pacurar). EIG members collected a lot of wonderful data on the butterfly and the project is rooted within the BCE network, including exchange with Hungarian and other colleagues.

Conserving endemic butterflies in Spain

By Miguel Munguira

The Species Recovery Plans for the endemic endangered species in Spain were published in 2015 and have been widely distributed to collaborators, stakeholders and webpages. These documents were produced in Spanish and English and can be downloaded from the BCE webpage (English version). During 2016 some of the management actions were planned in Sierra de Cazorla and Sierra Nevada. These actions are directed to clear pine plantations so new habitat could be created for the species *Polyommatus violeatae*. Panels with information about the four endangered species have also been displayed in the following protected areas: Sierras de Cazorla, Segura y las Villas Natural Park, Sierras de Tejeda, Almijara y Alhama Natural Park, La Sagra N2000 site, and Sierra Nevada National Park. As part of the public awareness campaign colourful leaflets with information about the four species have been delivered to

the mentioned parks and to tourist information offices. The parks are giving these leaflets to visitors that enter the visitor's centres of these protected areas. As a result of the project to protect the four endemic endangered species we published a scientific paper that summarizes the main research results obtained during the three years that the project lasted.

Financial support for this project is sincerely acknowledged and was provided by MAVA Fondation pour la Nature (<http://en.mava-foundation.org>). Reference: Munguira ML, Barea-Azcón JM, Castro-Cobo S, García-Barros E, Miteva S, Olivares J, Romo H (2017) Ecology and recovery plans for the four Spanish endangered endemic butterfly species. Journal Insect Conservation. DOI: 10.1007/s10841-016-9949-8.

Red List of Butterflies of the Mediterranean

By Chris van Swaay, Irma Wynhoff and Martin Wiemers

In 2016 the Red List of Butterflies of the Mediterranean was published. The assessments were already available online on the IUCN Red List website: <http://www.iucnredlist.org/initiatives/mediterranean>

All the 463 native butterflies occurring in the Mediterranean region have been assessed using the IUCN Red List Criteria (IUCN 2001). The assessments were compiled from a network of 35 experts from 20 countries in the region, and reviewed during a workshop in Málaga (Spain).

Overall, about 5% (19 species) of butterflies are threatened in the Mediterranean region. 2% is considered Near Threatened and more

than 6 % are Data Deficient. This percentage is similar to those of Mediterranean birds. The Mediterranean butterflies are slightly less threatened than the butterflies of Europe (8 %), probably because the higher area of remaining natural and semi natural habitats throughout the region.

The main current threat to Mediterranean butterflies is the habitat loss due to the changes in the management of semi-natural grasslands either through intensification, overgrazing or abandonment. Other important threats are intensity of tourism development in high mountains, specimen collection, domestic and agricultural pollution, climate change, transportation and service corridors, and mining.

LepiDiv Project (Distribution of butterflies in Europe and adjacent areas)

By Martin Wiemers & Josef Settele

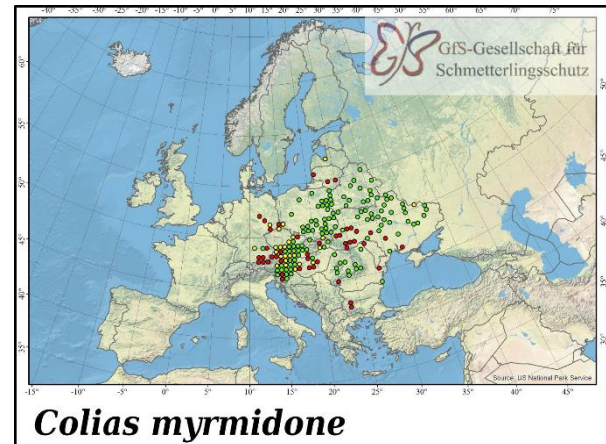
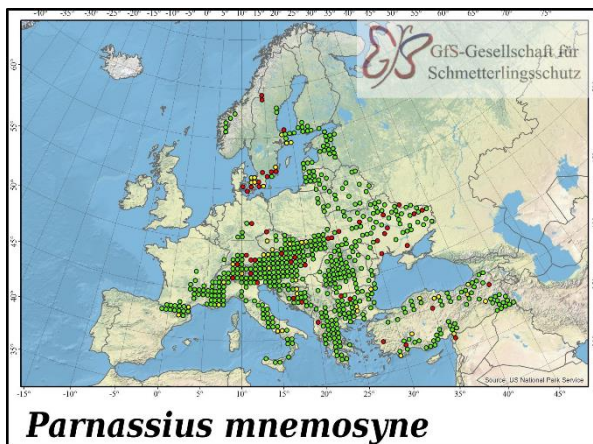
The LepiDiv project was launched under the auspices of the GfS (Gesellschaft für Schmetterlingsschutz = German Society for Lepidoptera Conservation) and the Helmholtz Centre for Environmental Research (UFZ) with support of BCE after publication and in continuation of the “Distribution Atlas of Butterflies in Europe” in 2011. Its aims are to update and improve the distribution maps as well as to collect species traits and make them available in digital form to facilitate ecological analyses and support conservation of European butterflies.

Already in 2015, a first set of distribution maps were made available online, which

included new data for Belarus as well as updated data for 18 European countries. In 2016, the maps were updated again, including maps of species which occur only in the Asian part of Turkey, and a first WebGIS version was launched which enables more flexible queries. We thank everybody who has provided data for the maps and are looking forward to feedback for further improvements and additional collaborations.

The LepiDiv website, which is currently being relaunched with a new design, is available at:

<http://www.ufz.de/lepidiv/>



Social media

Social media are becoming more and more important to communicate with our fellow Europeans. BCE continues to be active on Facebook (www.facebook.com/ButterflyConservationEurope) and in 2016 the number of 'Likes' grew

from 1,750 to 2,226 on 31 December 2016. Our Twitter following has also grown from 1,050 to 1,230. We are very grateful to Chris van Swaay, Dirk Maes, Sophie Lake, Sophie Collins and Sue Collins for running these accounts.

European Interests Group

By Simon Spencer, Chair EIG



Butterfly Conservation's European Interests Group (EIG) now has over 400 members and celebrates its 10th anniversary this year. They have worked with a number of local partners in many countries of Europe doing surveys for rare and endangered species of butterfly. In 2016 we did a survey for *Kretania hespericus* in the Montes Universales in Spain finding it at 8 sites. Our focus for 2017 will be Greece where we will work with Lazaros Pamperis to encourage butterfly recording and monitoring particularly in National Parks but also survey for some of Greece's most threatened species.

The website www.bc-eig.org.uk is a very useful source of information on European

butterflies with links to most European Butterfly websites. There are species lists/recording forms for many European countries and downloadable guides as to where to find butterflies. For France there are regional guides.

Anyone who enjoys seeing butterflies on holiday will find the EIG newsletters a mine of information with trip reports and updates on taxonomy. We will be producing a printed 10th anniversary edition. Back numbers are on the EIG website. Membership of EIG costs £10 per year in addition to the BC subscription. Details and application form on www.bc-eig.org.uk.

Future plans of BC Europe

- Organise and hold our partner meeting in Laufen in Germany from Wednesday 29th November to Saturday 2nd December 2017.
- Continue to work with colleagues in the European Habitats Forum to help implement the EU Biodiversity Strategy, including improving implementation of the EU Habitats Directive, influence EU policies, especially reform of the Common Agriculture Policy (CAP), and promote HNV farming and the role of butterflies as indicators.
- Develop the European Butterfly Monitoring Scheme (eBMS) with CEH and seek funding from the EU.
- Continue to support butterfly monitoring in countries with no schemes, or fledgling schemes.
- Continue to press the EU for regular funding to produce a suite of butterfly indicators.
- Continue to input into the EU Biogeographical Zone process, especially those covering the Alps and Mediterranean.
- Mobilise European records of butterflies to GBIF, so that they become available for research and conservation on a European, national and local level.