

# EBMS UPDATES



## NUMBERS EBMS IN 2021

Butterfly species registered on transects

**259**

Total butterfly individuals on transects

**165.123**

Species most registered

1. *Pieris rapae* 12.988
2. *Maniola jurtina* 12.391
3. *Coenonympha pamphilus* 9018

\* numbers based on data submitted to eBMS website during 2021 (not all BMSs)

## EBMS CONTINUES GROWING

The eBMS network continues to grow and improve. The network now has **21 partners in 19 different countries**, and further efforts are being made to include formally some of the countries that recently created their BMS and the new countries that will set up soon their own schemes of monitoring. The latest additions to the eBMS Network are Croatia, with some transects running in protected areas, and Norway, which is adding transects in the Boreoalpine bioclimatic region:

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*“Giving environmental awareness to young generations; transferring the strategic importance of the environment to young environmental leaders”*

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We are currently working on adding countries that set up their BMS in the last ABLE project, as well as supporting other recent schemes and their coordinators to help expand their coverage.

## DATABASE

The eBMS network and their 21 partners continue to share their BMS data to create a solid and robust database for monitoring butterflies across Europe. During 2021, we made a major update to the eBMS database and are currently compiling the final butterfly datasets up to

and including 2020. We are also doing some quality assurance and soon look forward to releasing eBMS v4.0 that will contain all the data available up to the year 2020.

Not only is the eBMS network is growing, but so are the staff working on the data. We are delighted to welcome Alba Gomez Segura at UKCEH, a specialist data scientist, who will help us manage and improve data integration in the eBMS database.

## ACTIVITIES 2021 ON NEW BMS

2021 has been a year of recovery after the pandemic hit in 2020, affecting field work and activities to promote butterfly monitoring in Europe. In the last ABLE project, 10 different countries created or consolidated new Butterfly Monitoring Schemes. We would like to show how these countries are doing and which activities have been done in 2021 to gather more volunteers, transects and to share the joy of counting butterflies.



*Butterfly workshop in the Natural History Museum Vienna – Picture from Daniela Lehner*

### *Austria*

In Austria, 31 transects were registered and delivered data to the eBMS during 2021. Most transects are located in East Austria around Vienna. In total, **5259 individuals from 75 butterfly species** and individuals from 8 genera or higher taxonomic level have been reported over the season between April and October 2021. A group of citizen scientists was established in northern Burgenland (a province of Austria) following a workshop of [ABC \(Austrian Butterfly Conversation\)](#) in cooperation with the Naturpark Neusiedlersee-Leithagebirge and Nationalpark Neusiedlersee-Seewinkel. This group of volunteers regularly monitored 7 transects with a total of 49 walks and 827 records in 2021. An online meeting is planned in December 2021 to discuss the results and further action next year.

ABC held several workshops and information events in 2021 (part of them online) to advertise butterfly monitoring. They launched a cooperation with the Natural History Museum Vienna starting with a butterfly workshop in September 2021. They also plan to continue with identification courses and transect workshops next year. The aim for 2022 is to secure the commitment of citizen scientists to continue walking transects and establish regular butterfly monitoring workshops.

### *Cyprus*

This island located on the Eastern Mediterranean Sea is the migratory path for several species occurring in eastern Europe and beyond. It also acts as a refuge for butterflies for almost the entire year. The Cyprus BMS was established during 2019 and 2020 with two coordinators and their efforts continue to consolidate the scheme across the whole island. Several actions have been done during 2021 to promote and improve the awareness of butterfly monitoring in Cyprus. Firstly, the coordinator team started to distribute butterfly nets to new butterfly monitoring members who were willing to start counting butterflies regularly. The [Field Guide of Cyprus](#) was printed into hard copies in English to help volunteers in the identification of Cypriot butterflies. During 2022, eBMS and Cypriot coordinators will translate this material into Turkish and Greek for further distribution to local people.



One small event, **Youth Environment Leader Training Workshop**, was held for young Cypriots in October 2021 in the Kyrenia mountains. The event was focused on giving environmental awareness to young generations, explaining the strategic importance of the environment to young environmental leaders in all aspects of the forest. Information was also given about butterflies, medical aromatic plants and endemic plants, while completing butterfly observations in the field.



*Youth Environment Leader Training Workshop –  
Kyrenia, Cyprus October 2021*

Cypriot coordinators are working hard to find funds for a project to expand the Cyprus BMS further during the coming years.

### *Portugal*

2021 was a great year for the Portuguese Butterfly Monitoring Scheme. The number of active sites increased from 26 last year to 60 in 2021, with a total of 91 species covered. We are also delighted that the island of Madeira has joined the scheme, covering with some beautiful and rare endemic butterflies are not found on the mainland.

Data analysis has not yet been completed, but we can already say that more than a dozen species have been added to our national counts, including some very localized species in our country such as Provence Orange-tip (*Anthocharis euphenoides*) recorded in the Vila Chã's transect, Vimioso, in north-eastern Portugal.



At the beginning of the year, the 1st Meeting of Portuguese Volunteers was organised, an online event where the results of the first two years were presented. More than 50 volunteers across the country had the opportunity to present and discuss their results with their peers. This gathering was very important for the exchange of experiences and getting to know one each other, albeit virtually. They also had the opportunity to promote several webinars and workshops about the Portuguese Scheme [\*Censos de Borboletas de Portugal\*](#) in different regions of the country. These talks and courses were directed to the general public, local entities and to the Instituto de Conservação da Natureza (ICNF), one of the partners of the Portuguese eBMS.

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*“My participation in this project nurtures several dimensions of my person”*

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But the best part has been to receive the feedback from volunteers about their experience, like this one from Luís Castro, who counts butterflies near Sintra in Portugal: *“My participation in this project nurtures several dimensions of my person: the connection to nature; the fascination for invertebrates; sharing time and information for the common good and conservation of biodiversity; and contributing to the development of*

*science through a study with a long series objective. All this helps make each transect a great pleasure to walk and being a volunteer in the "Census of Butterflies of Portugal".* Luís Castro, Biologist

## *Hungary*

HuBMS (**Hungarian Lepidoptera Monitoring Network**) is closing a busy year in 2021. Due to the COVID situation, they had to postpone their opening workshop in April. It was held later in August as part of the National Lepidopterists' Meeting in the Kiskunság National Park. During the transect season, apart from running over 30 weekly transects, for general and special targeted, they continued testing and using the eBMS ButterflyCount app. As of this year, the app has been officially included in Hungary's biodiversity monitoring and reporting protocol on Natura 2000 species. They also conducted a large number of parallel 15-minute count/transect surveys to acquire data for method comparison and analysis.

To promote Lepidoptera monitoring and pollinator conservation, HuBMS participated in two major Citizen Science events: the BioBlitz in the city park of Gödöllő at the International Nature Film Festival and the citizen science day at the National Botanical Garden in Vácrátót. They led guided 15-minute count tours and live catch moth trap sessions for the visitors. Additionally, a photo exhibition on transect monitoring is to take place later this year, in December.

Besides its nationwide activities, HuBMS is also actively cooperating with local environmental NGO's and local governments, overseeing the pollinator-friendly mosaic mowing of a locally protected site of urban grassland and seeking participation in the Lepidoptera monitoring of the newly introduced extensive parkland management practices of Budapest.

## **EBMS NETWORK**

The eBMS network has become a large and a unique system collecting annual data on butterfly monitoring across the continent of Europe. Since its creation in 2014 when the older and more established BMSs that were running in Europe came together, data has been added from many different BMSs to create a unique database, the eBMS. In the ABLE project (2018-20), we helped in the creation of ten new BMS and supported several other fledgling schemes. Under the new SPRING project funded by the European Commission, we will continue to support existing partners and add new partners, including the 6 remaining EU countries that currently have no scheme (Slovakia, Denmark, Greece, Romania, Latvia and Lithuania). The aim is to complete the network to include all European Union countries. The information, knowledge and support will also be offered to other European countries that want to join and collaborate in this powerful network.

## Contact Us

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