

SUMMARY 15MIN COUNTS

A REVOLUCIONARY METHOD

In 2020, eBMS released the **15-min Count** method, which has gained popularity and widespread use throughout Europe since then (Fig. 1). This method was designed based on the use of time-counts in the UK for counting butterflies within a certain time frame. The 15-min Count provides more precise and informative data (abundances and species) than opportunistic observations, yet is less rigid than transects, allowing for counting anywhere during 15 minutes. Is the perfect mix!

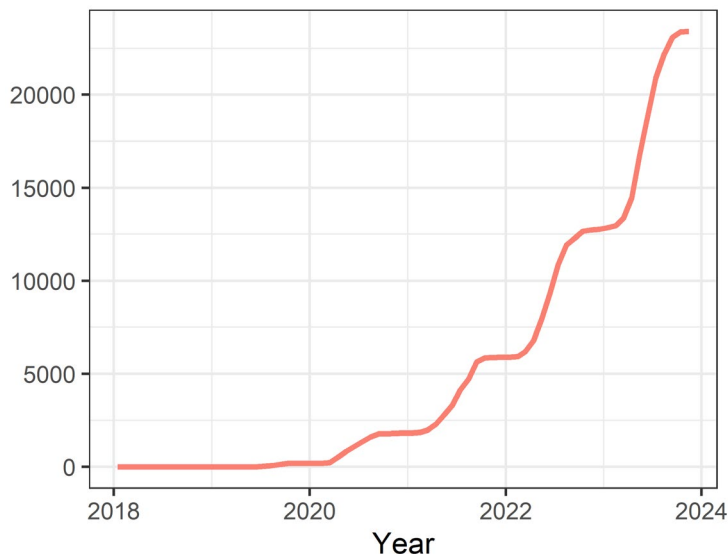


Fig. 1 Cumulative number of 15-min count visits in the last years.

“15-min Count to easily record butterflies in any location with a smartphone”

15-MIN COUNTS IN NUMBERS

Total number of 15-min Counts done: **23.472**

Total number of recorders: **646**

Total number of butterflies registered: **456.403**

Total number of butterfly species: **314**

Numbers of unique days doing 15-min Counts: **1192**

**total numbers up to December 2023*

Every year the number of recorders using 15-min counts grows exponentially to over **600 users in 2023**. Which means that more counts are done, and more people is involved in this methodology (Fig.2).

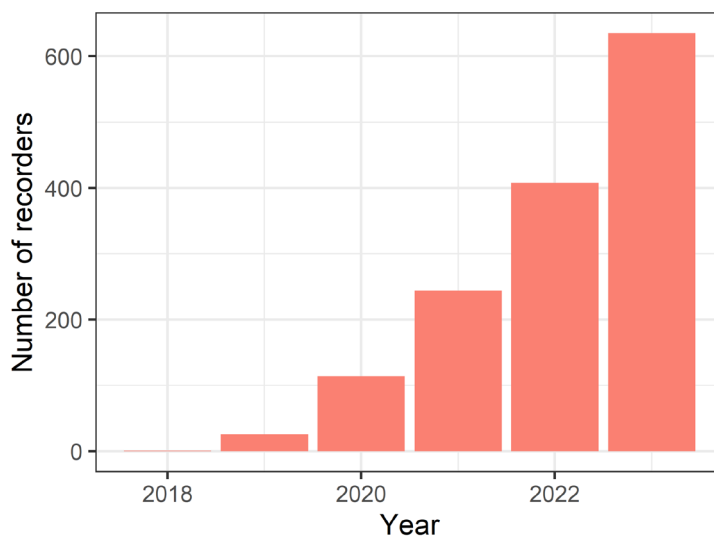


Fig. 2 Number of recorders of 15-min count visits in the last years.

COUNTS EVERYWHERE

The 15-minute counts have been used in almost **all European countries** in the last years, with higher numbers in certain countries like the Netherlands, Hungary, Spain, Cyprus or UK because of testing purposes and specific projects in which the method had been used.

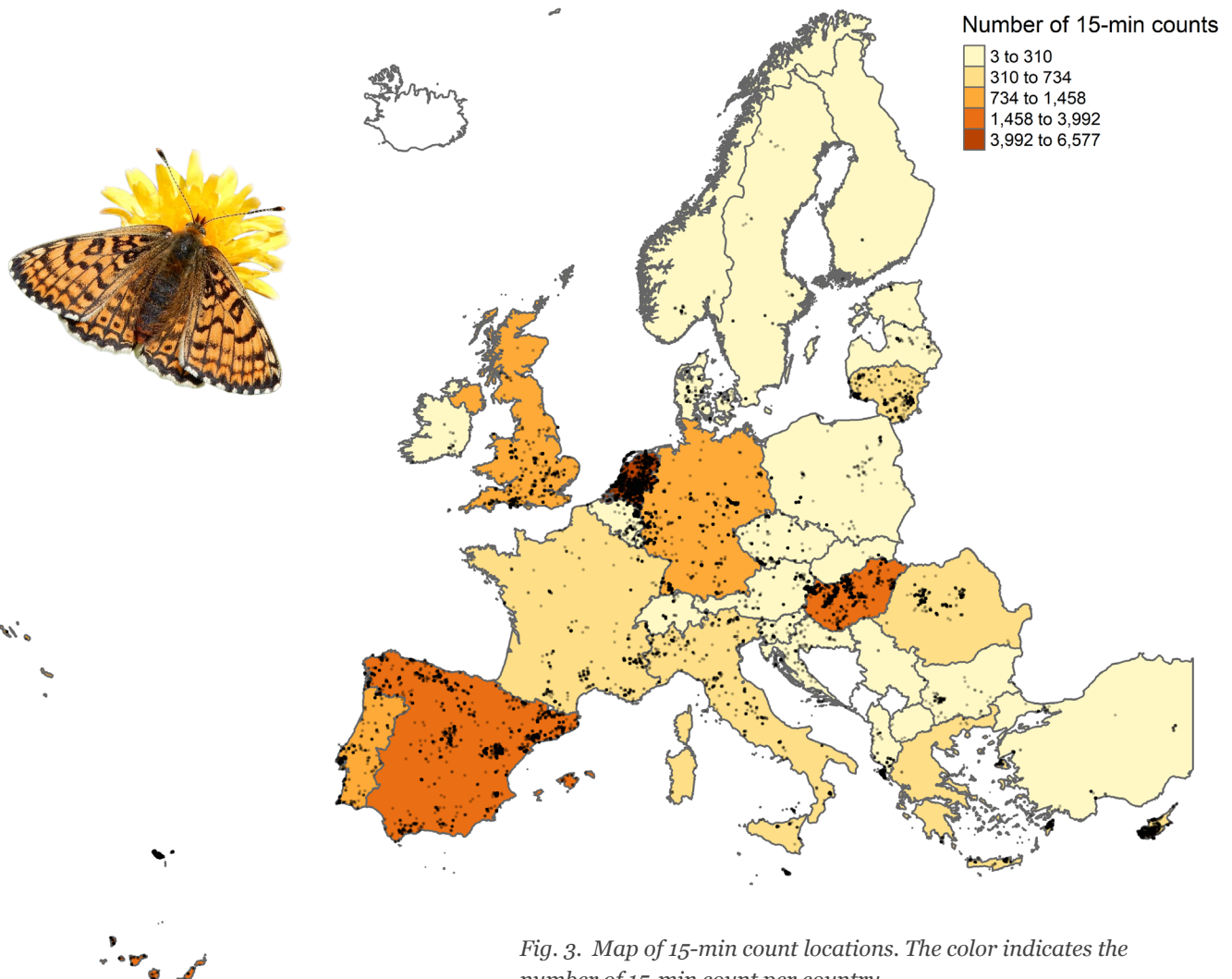


Fig. 3. Map of 15-min count locations. The color indicates the number of 15-min count per country.

Uses of 15min counts

This method is versatile and helps eBMS cover more areas. It has several useful applications in scientific and nature conservation projects. Some of them:

- ❖ Data collection in remote areas (islands, mountains, isolated habitats) and low-monitored areas.
- ❖ Data collection in monitoring programs for threatened species.
- ❖ Sampling to determine the composition and abundance of lepidoptera in certain habitats.
- ❖ Opportunistic data collection (holidays, singular habitats and species).
- ❖ Collect absences (hard zeros), telling us where and when there are no butterflies.

Using 15-minute counts in addition to the transect method can provide better data on species and area covering data graphs. However, **it should never be used as a substitute of transects**, the most robust monitoring method of butterfly monitoring schemes.

FOLLOWING THE BUTTERFLIES

The 15-minute counts follow the typical pattern of butterfly flight periods, with more congregation during the middle months when adult activity is higher (Fig. 4). In 2023, more than 2000 15-min Counts were registered in a month, specifically in June 2023.

The average number of butterflies per 15-minute count in each month throughout all the registration years (as shown in Fig. 5) follows a consistent pattern, with more butterflies observed during periods of higher monitoring activity, particularly in June, July, and August. It is also noteworthy that January had an average of 10 registered butterflies per count. Despite being a cold month, these registrations may be attributed to hibernating species appearing on sunny days or registrations from warmer areas of Europe.

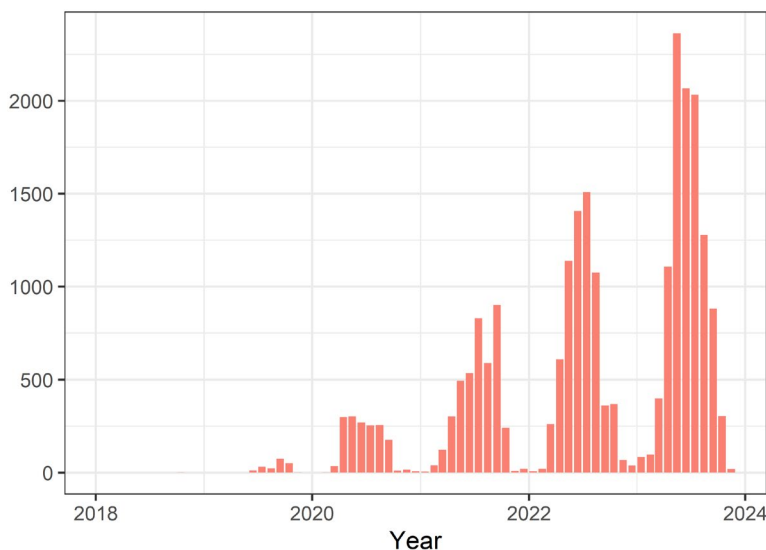


Fig. 4 Number of 15-min count registered per month in the last years.

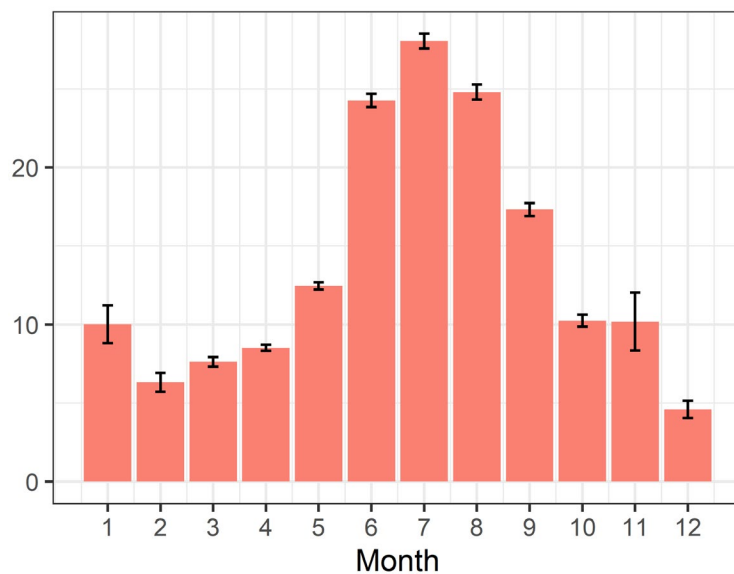


Fig. 5 Mean number of butterflies per month in the last years using 15-min count.

“15-min Count is useful for rare species and locations that are difficult to visit.”

BUTTERFLYCOUNT APP



15-min Count can only be made using the app ButterflyCount, which is specifically designed for this method. The **app registers the location of every individual butterfly** and the path walked during the count. This is the main difference with respect to transects entered manually in the website. To get started, download the app, create an account on the eBMS ([website](https://butterfly-monitoring.net/ebms-app) or [app](#)) and begin your 15-minute count.

15-min Count is recommended for users with previous butterfly knowledge on identification

How to make 15min counts

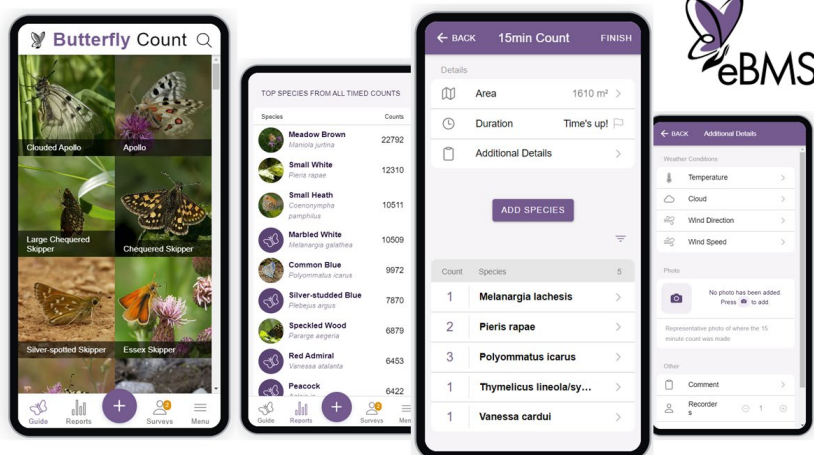
Observers can use their mobile phones to record the number of butterflies or other insects per species in the field for 15 minutes. The survey automatically includes weather data from the nearest weather station if the internet is available. If GPS is available, the route is recorded; otherwise, the route or area can be drawn.

Once the 15 minutes are up and the species and abundance have been recorded, press the 'finish' button. The 15-minute survey is currently pending. This is the time to review the data and area, and include the final identifications. Once all checks are complete, the survey can be submitted directly to the eBMS database.

- ❖ More information on the website: <https://butterfly-monitoring.net/ebms-app>
- ❖ Access and download of your data on the website
- ❖ Explicative videos on the use of the app in YouTube ([Butterfly Conservation Europe account](#))

15-MIN COUNT FEATURES

- Stopwatch function
- Warning when there are 3 minutes left and stops the count at 15 minutes.
- Registration of species complexes for difficult species
- Add additional information: comments, photos and recorders
- Access and download of the data directly



Contact Us

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