

Counting butterflies in rural areas

Why count butterflies?

Butterflies are **good indicators** of the quality of habitats, including farmland. Please **take 15 minutes to observe and count butterflies** – on farms or in towns – this will help us to understand the health of our landscapes.

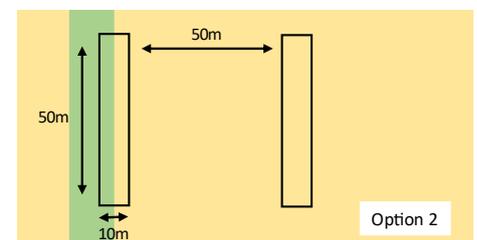
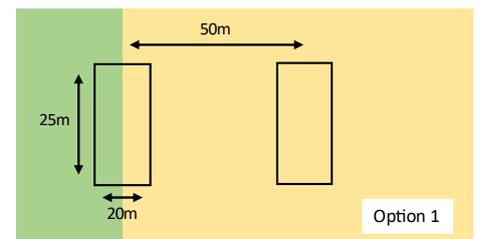
What will be done with your observations?

The Agroecology-Transect project combines the knowledge and expertise of farmers, scientists, policy makers and NGOs from all over Europe. We will analyze the butterfly data to understand how agroecological farming practices shape agricultural ecosystems, and to inform and adapt biodiversity conservation actions across Europe.

Undertaking the survey

Where?

- 1. Choose a field.** It can be covered by wheat, rye, corn, rapeseed, potatoes, apples, olives, vineyard, fallow land (unsown or unploughed) or grassland.
- 2. Choose one border of the field.** It can be any border between the selected field and an adjacent habitat, such as hedges, buffer-strips (vegetation between fields), flower strips, forest, woodland, grassland or another field. The border should be easily accessible.
- 3. Select two sampling areas.** The first area should be at the border between the field and the adjacent habitat, and the second one inside the field (at least 50 m from the field border). Each area should ideally be 20x25m (option 1). The size of this area can be adjusted to 10x50 m (option 2) or 5x100m if the adjacent habitat is too narrow (see figure). **Please register both sites individually!**



Field Adjacent habitat Sampling area

Please respect farmers and their field

- Make sure you **receive permission** from whoever owns or farms the field.
- When walking in the field, **limit the damage** to the crop by walking between crop rows as much as possible.
- If you cannot obtain permission, sample only the area at the border between the field and the adjacent habitat, without entering into the field.

When?

- **Between April and September**
- **At least three times** or more is very welcome (some people monitor every week). This is important and interesting because butterflies change during the season.
- **On a warm, sunny and windless day.** Above 13°C on sunny days, 17°C on cloudy days.
- **Between 10:00 and 17:00**, when butterflies are most active.



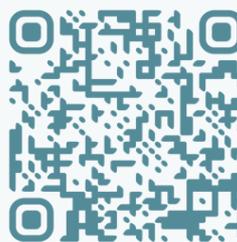
Find out about the project and register your site

How?

Get the Butterfly Count app

If you cannot to use the app, you can download and print our recording sheets at <https://www.agroecology-transect.net/news/butterfly-survey/>

Android



Apple



Before you start

1. **Turn on the Butterfly Count app**
2. **Start an observation by clicking on “+”.**
The timer can be paused at any time.
3. **Assign a project.** Click on *Additional details>project* and select your local Agroecology transect project. The first time, register to one of the open projects in the “all projects” tab.
4. **Select a location.** Click on “Area” and choose an existing location from the project, or add a new one (see “Register a new location”)
5. **Check the weather data** under ‘Additional Details’.
6. **Add a photo of the location.**

Register a new location

1. **Click on “Area”** in an observation, after assigning it to a project.
2. **Outline the sampling area on the map.** Turn off the GPS, click on the pencil icon to edit, and then erase the GPS location point (red bin icon). Draw the sampling area with the “polygon” tool. Save by clicking on the green check mark.
3. **Click on “Add”** in the project locations tab. Give your site a unique and meaningful name. **Please use the identical name when registering the site on the website.**
4. **Provide additional information.** You will be able to describe the habitat type, size of the vegetation area, etc. in the app or the website.

Start counting!

- **Walk slowly** around the site for **15 minutes** (also back and forth).
- **Record all butterflies that you see in the area.**
 - ✓ Identify them to the species level if possible.
 - ✓ If you cannot identify a butterfly, note the colour and size
 - ✓ If you hesitate between species, you can record a “species complex” (e.g. *Pieris rapae/napi*).
- **Record the number of individuals of each species by clicking on the number next to the species name.** Try not to count the same individuals twice. If unsure, note the maximum number of individuals that you can see at the same time.
- **Take pictures!** Especially if you need help with identification.
- After the 15 min are over, you can still edit your observation and check with a book, an app, or ask experts if uncertain.

Remember to upload the observation— even if you didn't see any butterfly!

IMPORTANT: This field guide is for conducting 15-minute observations for the Agroecology Transect project. If you would like to participate in long term transect observations to support the national butterfly monitoring scheme, please contact the formal national partner organisation in your country. For an overview visit <https://butterfly-monitoring.net/partners>.



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