

## Nature's Sure Connected - Butterfly Survey Timed Count Method

*Time counts are a useful method for monitoring rare habitat specialist butterflies especially those whose distribution change over time across large sites.*



### When to carry out your butterfly timed count?

**When to record:** Your count needs to be within the flight period of the species you are trying to find. For this project we are focusing on looking for Adonis blue and silver-spotted skipper. **Flight periods:** *Adonis blue* - May to June (first brood) and August-September (second brood), *Silver-spotted skipper*: July-September.

**Time of day:** Timed counts should ideally be made between 10:30 and 16:30 hours. Butterfly activity may drop off rapidly during the late afternoon on warm days, so later times should be avoided if possible.

**Weather conditions:** Timed counts should only be carried out in warm and at least bright weather, with no more than moderate winds and not when it is raining. The minimum criteria are either 13-17°C with at least 60% sunshine, or if there is no sunshine the temperature must be 17°C or above. Wind speed (Beaufort scale) should be no more than 5 unless the survey area is sheltered from the wind. Check that conditions are suitable before you start the count and that if the temperature is less than 17°C there is likely to be sufficient sun for butterfly activity.

### Equipment

Survey site map, butterfly recording form, butterfly identification guide or book, pen or pencil, notebook (not essential), binoculars (not essential).

### How to do the count?

1. We will provide you with a map of the site to survey. This will give you details of the grid reference, the total area of the site, the accessibility and postcode for the site. You will need to print or request a butterfly recording form from a member of staff and use this to conduct your survey.
2. Initially take a few minutes to fill out the survey conditions section of the form e.g. start and end time, average wind speed and temperature (refer to **Survey Conditions Form Help** section on this document). Some aspects will need to be completed at the end of the survey.
3. Briefly walk the site to identify the extent of the site and where is accessible for your route.
4. Return to your initial start point and begin the survey making a note of your start time.
5. Count butterflies by walking the site, either in a series of parallel lines or in a zigzag path, covering the flight area as thoroughly and evenly as possible. It is important the walk passes through areas of high and low numbers of butterflies.
6. Recording should be made at a slow, steady pace. Count the number of each species of butterfly seen in a one hour period covering the whole flight area.
7. It is acceptable to count all butterflies seen either side of you as you walk the site. However, it is advisable to limit your count area to 2.5 m either side of you to avoid possible over counting. Avoid counting the same butterflies twice on sharp doglegs. Elsewhere, counting the odd butterfly twice may occur, but do not worry as the analysis accounts for this.
8. Please conduct the survey for one hour even if there are no or few butterflies.
9. On completion of the survey check that all of the survey condition boxes on the form have been completed before leaving the site.
10. Once the survey is completed please download the **NSC Butterfly Data Entry Form** and transfer the data from your field form onto the spread sheet. Even if there were no butterflies recorded please return the form with all of the information completed – negative results are just as valuable as positive results.
11. If you are unable to access spread sheets at home please send the completed NSC Butterfly Recording Form to a member of the project team via email or in the post to Tyland Barn.
12. Once the data entry form is complete please return this via email to [alana.skilbeck@kentwildlife.org.uk](mailto:alana.skilbeck@kentwildlife.org.uk)

## Survey Conditions Form Help

**Start and end time:** Please use a 24 hour clock.

**Duration of search:** Please complete a 1 hour search. If you had to stop the survey for any reasons please indicate the time you spent conducting the survey.

**Average wind speed:** Use the Beaufort scale (table below) to estimate the average wind speed - if necessary use a weather app to identify the wind speed and record the correct Beaufort scale number.

**Wind direction:** Record the wind direction on site by hand or using a reliable weather app.

**Search width:** Please try to survey 5m either side of you.

**Average % sun:** Record the percentage time during your survey that the sun was shining. Bright cloud casting a shadow is classed as sunny. Please complete this at the end of survey.

**Average temp (°C):** Record the temperature e.g. with a reliable weather app or thermometer.

The Beaufort Scale			
Code	MPH	Description	Specifications on Land
0	0-1	Calm	Smoke rises vertically
1	1-3	Light air	Slight smoke drift
2	4-7	Light Breeze	Wind felt on face & leaves rustle
3	8-12	Gentle Breeze	Leaves and twigs in constant motion
4	13-18	Moderate Breeze	Raises dust & small branches move
5	19-24	Fresh Breeze	Small trees in leaf begin to sway
6	25-31	Strong Breeze	Large branches move & trees sway

## Downloads

Butterfly Identification Guidance

- [Downloadable Guide to UK Butterflies](#)
- Field Studies Council Butterflies Identification Chart (<https://www.field-studies-council.org/publications/pubs/butterflies-identification-chart.aspx>) (£4 each)
- Identification Book – *Pocket Guide to the Butterflies of Great Britain and Ireland* (<https://www.nhbs.com/pocket-guide-to-the-butterflies-of-great-britain-and-ireland-book?bkfno=219820>) (Around £10 for the latest version but earlier editions are just as useful)

Recording & Data Form

- [NSC Butterfly Recording Form](#) – spread sheet
- [NSC Butterfly Recording Form](#) – printable
- [NSC Data Entry Form](#) – spread sheet

Many thanks for taking part in the Nature's Sure Connected Butterfly survey.



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