

# Recording and monitoring Butterflies.

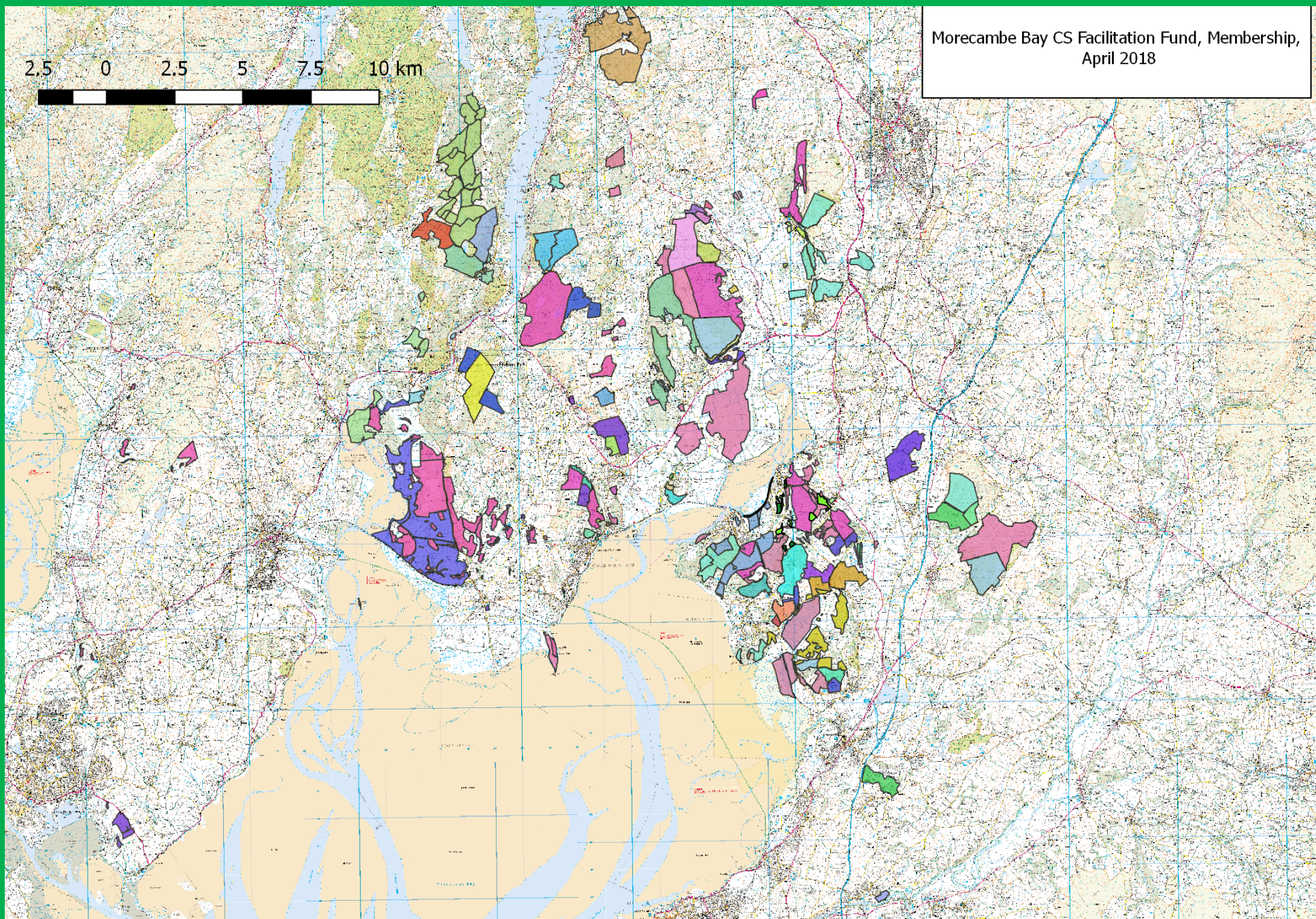


The Morecambe Bay Facilitation Fund, Cumbria





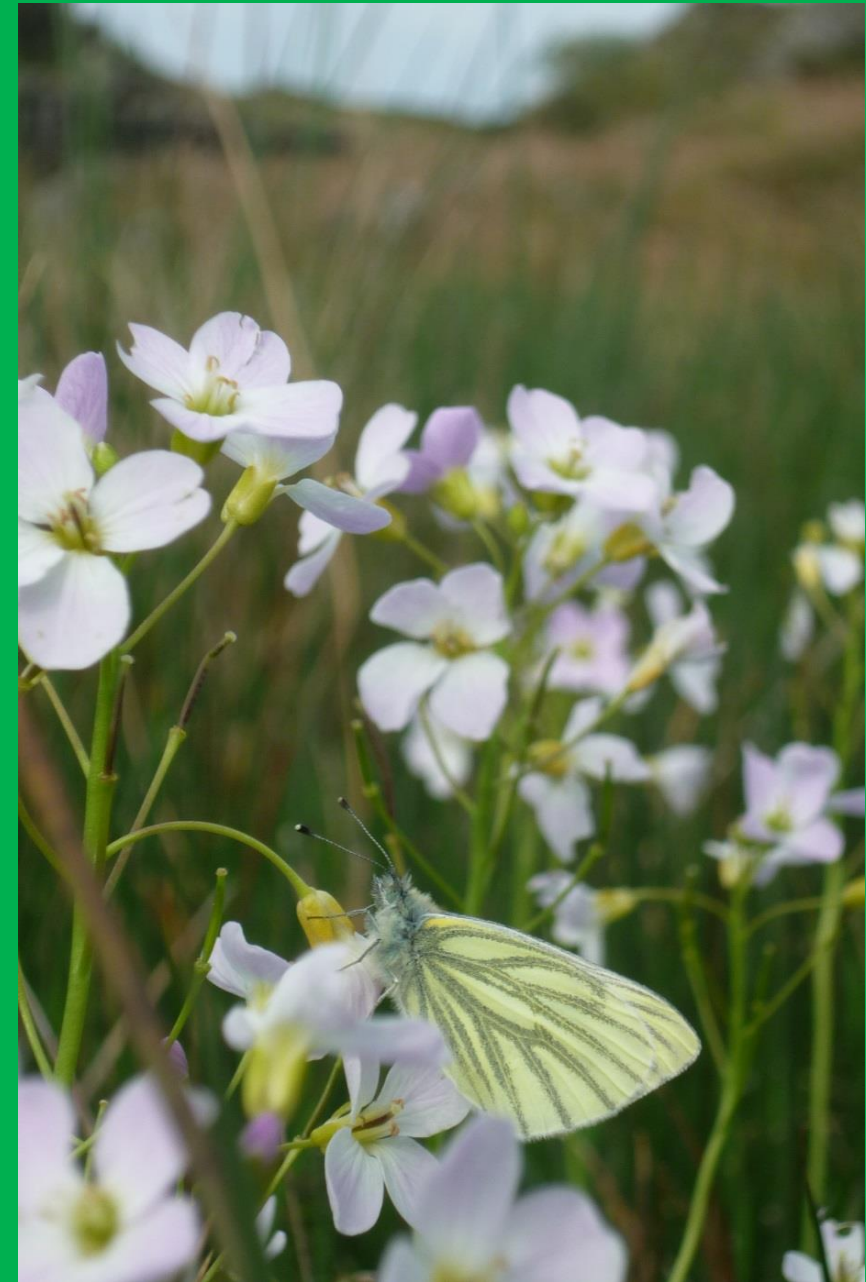






# Recording Butterflies

- Easy to count (probably)
- Short life cycles, respond quickly
- Sensitive to the weather
- Occur in a wide range of habitats
- Wealth of information

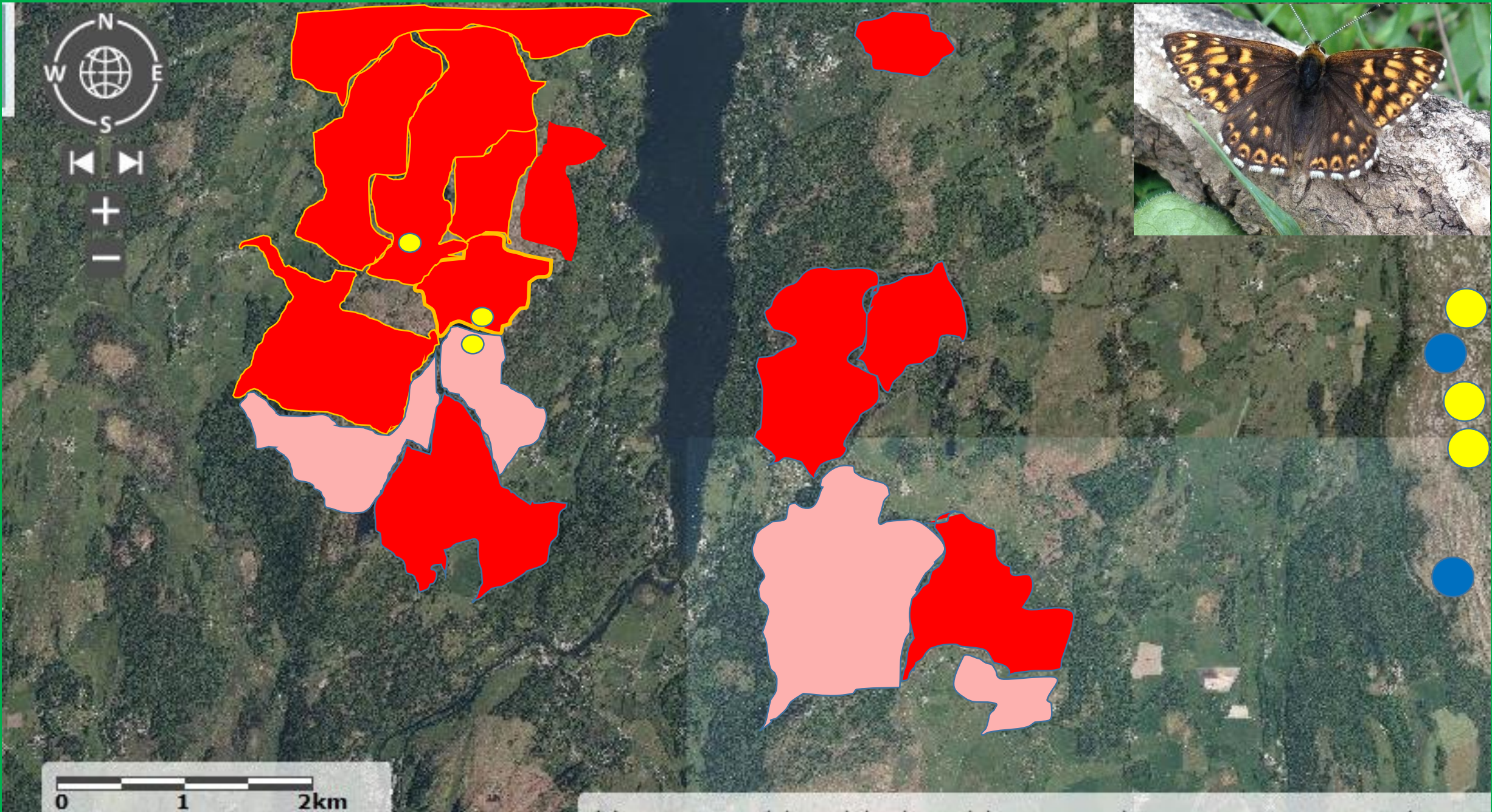


# Butterflies and moths are indicating

- Climate change –
  - moving north,
  - earlier in year,
  - second broods.
- Species decline
  - $\frac{3}{4}$  of UK butterfly have declined in both range and abundance.









# 1. Big Butterfly Count

- What is it
  - Lovely thing to do
  - You get a tick sheet
- When do it
  - 15 minutes sitting in one place
  - Sunny warm day
- How report findings
  - There is an app to report findings
- Newsletter of results from 30,000



The banner features a blue sky background with a large orange and black butterfly on the right. In the top right corner, there are social media icons for Twitter, Facebook, and Instagram, along with 'Tweet' and 'Like' buttons. The Butterfly Conservation logo is on the left. The main title 'big butterfly count' is in a large, green, outlined font, with the dates '20th July - 12th August' below it. A paragraph of text encourages participation, with a link to 'Find out more about this project'. Below this, three white boxes illustrate the steps: Step 1 (Get ready) shows a tick sheet, Step 2 (Join in) shows a person in a hat writing, and Step 3 (Submit sightings) shows a butterfly on a flower.

Butterfly Conservation

## big butterfly count

20th July - 12th August

Help us take nature's pulse by joining the big butterfly count. [Find out more about this project](#)

Step 1:  
Get ready

Step 2:  
Join in

Step 3:  
Submit sightings

# 2018 Big Butterfly Count feedback

The 2018 results for all 19 of the **big butterfly count** target butterfly and moth species are shown below

		Abundance	% change from 2017
1	Small White	273,650	161%
2	Large White	210,665	104%
3	Gatekeeper	72,877	-54%
4	Peacock	54,287	9%
5	Meadow Brown	51,899	-56%
6	Common Blue	50,118	51%
7	Green-veined White	49,515	78%
8	Speckled Wood	35,294	12%
9	Red Admiral	33,508	-73%
10	Small Tortoiseshell	23,210	-32%
11	Comma	22,881	-40%
12	Holly Blue	22,302	122%
13	Painted Lady	14,193	-4%
14	Ringlet	11,902	-62%
15	Silver Y	11,580	256%





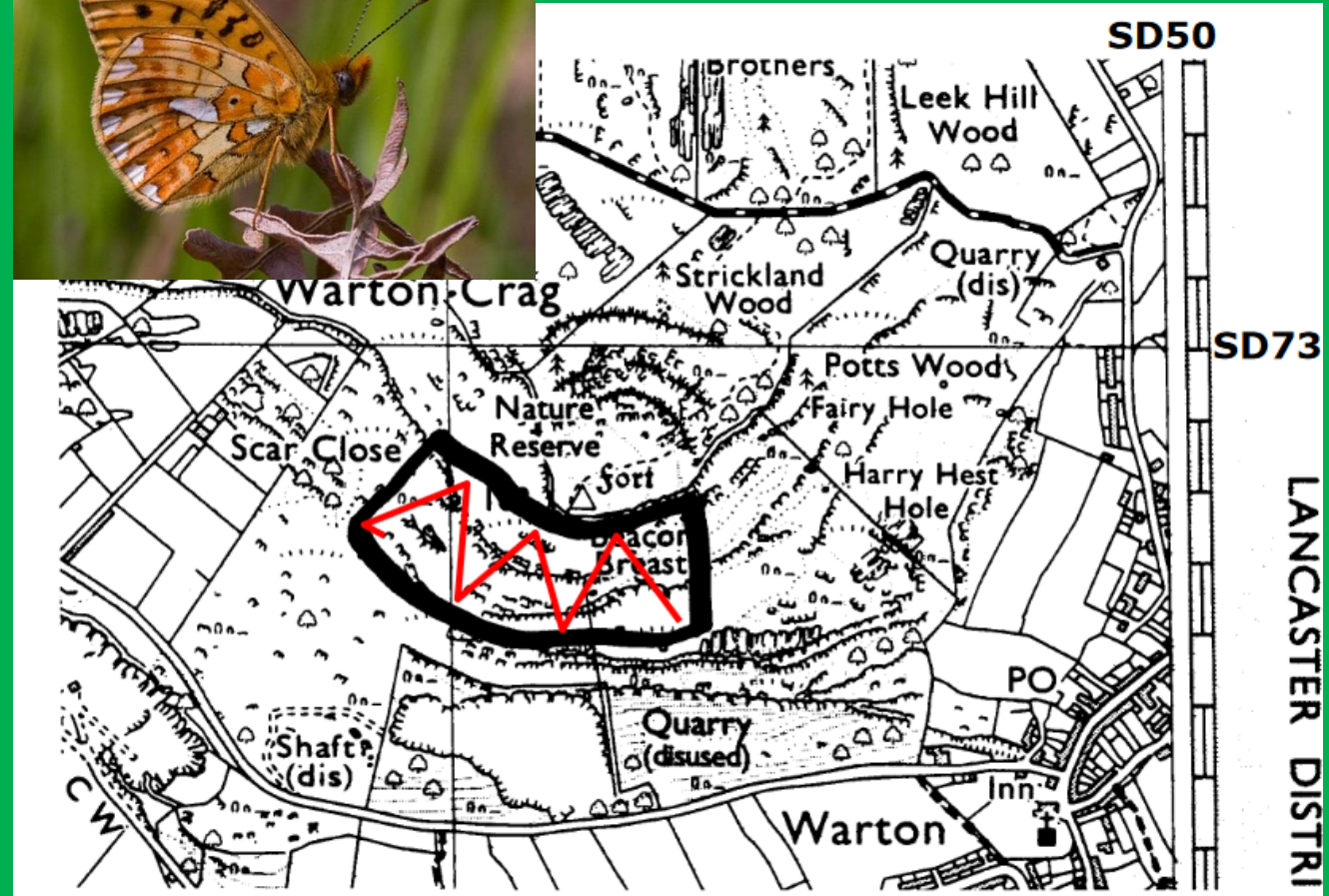
# Standardising Recording

- Temperature –
  - 17 degrees
  - 13-17 if + 60% sunshine
- Wind –
  - Beaufort scale, 5 or below, (small trees in leaf begin to sway)
- Time of day -
  - 10 – 4 :30 allowable
  - But 10:45 - 3:45 ideal
- 5 meter box
- Time of year
- Route



## 2. Timed Counts

- What is it
  - A larger defined area
- When you do it
  - Weather Conditions
  - Time taken
  - Date
  - Map site
- How often
  - Once or several times
- Report online (to UKBMS)
- Google 'butterfly timed counts' – UKBMS (Annual Timed Counts)





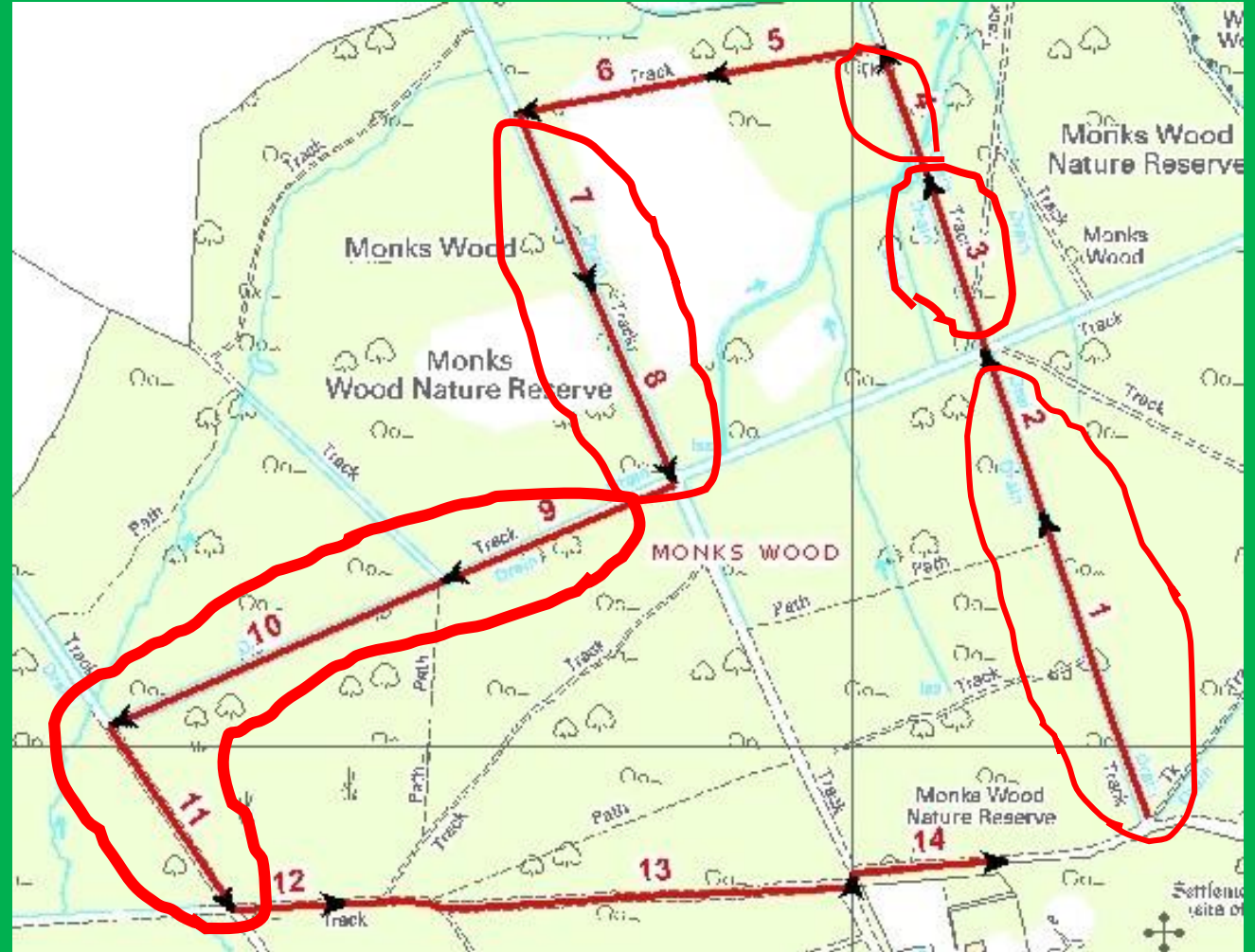
# Brown Hairstreak





### 3. Butterfly Transect

- What is it
  - Fixed route surveys
  - 40mins
  - Sections about 100m
  - Weekly
- How to do it
  - Standardized recording
- How often
  - Weekly





# August 12<sup>th</sup>

## Enter Results on the UKBMS transect site

[illegible]



Tools to help you





## G2: FIELD GUIDANCE NOTES FOR BUTTERFLY TRANSECTS

Page 1 of 2



### TRANSECT RECORDING

Butterfly transects are a way of measuring changes in the abundance and variety of butterflies present at a site from year to year. This requires a commitment to record weekly throughout the main six-month period in which butterflies fly in the UK, or if monitoring a single species, the flight period of that species. It is important to stick to the methodology and remain consistent if results are to be comparable from year to year. When data from a number of transects in an area or over the whole of the UK are combined this can provide information on changes in butterfly numbers over that area. The data also enables the evaluation of changes in butterfly populations on a single site, e.g. due to the effects of management, by comparison with trends from many sites.

### WHEN TO MAKE TRANSECT COUNTS

**Time of year:** A full season's transect counts take place once a week for 26 weeks from the beginning of April to the end of September. Week 'one' runs from 1<sup>st</sup>-7<sup>th</sup> April, week 'two' 8<sup>th</sup>-14<sup>th</sup> April and so on, until week 'twenty-six' which runs from 23<sup>rd</sup>-29<sup>th</sup> September. You can record earlier than 1st April (25<sup>th</sup>-31<sup>st</sup> March is week 0, 18<sup>th</sup>-24<sup>th</sup> March is Week -1 etc.) or after September (30<sup>th</sup> Sept- 6<sup>th</sup> Oct is Week 27, and so on). If the weather conditions are suitable, you should record even if there are not likely to be any butterflies present (e.g. early/late in the season) – a negative result is still a result.

**How many weeks:** As many weeks should be walked as possible, as gaps reduce the quality of the data and too many can render it virtually useless. The more gaps the less species-indices can be calculated. Where it has been decided that a transect is aimed a single, usually rare, species (or sometimes for two or three species) then weeks should be walked that cover the flight period(s), with zero counts at either end.

**Time of week:** You can record on any day of the week, but should aim to walk the transect on the first opportunity that the weather is suitable (some weeks you may not get a second chance!). You only need to record more than once a week if the weather on your first walk did not meet the criteria.

**Time of day:** Transect counts should ideally be made between 10:45 and 15:45 hours, though between 10:00 and 17:00

- Summary of transects (G1)
- Field Guidance (G2)
- How to fill in the form
- how to enter the data on line

- Google 'Butterfly Transects Resources' UKBMS

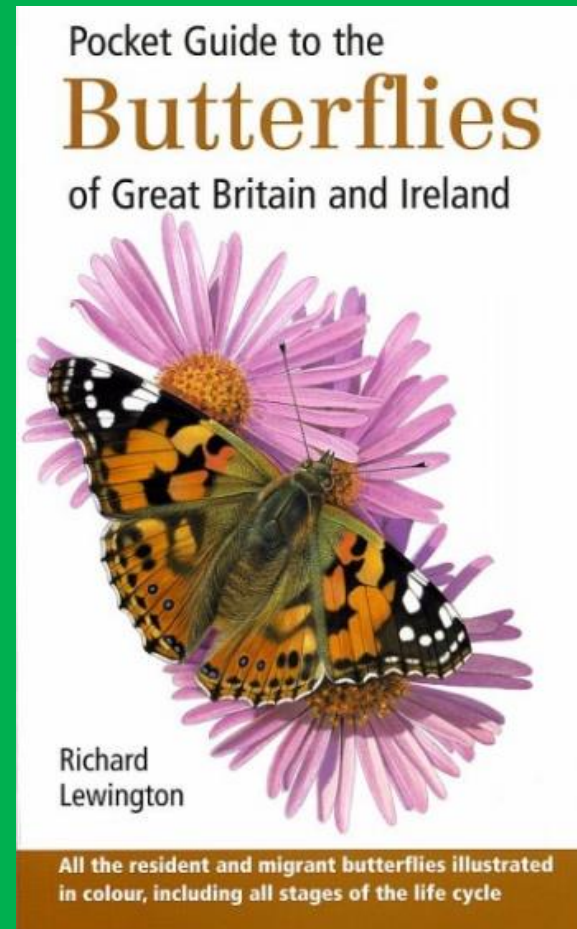


# Identification Guides

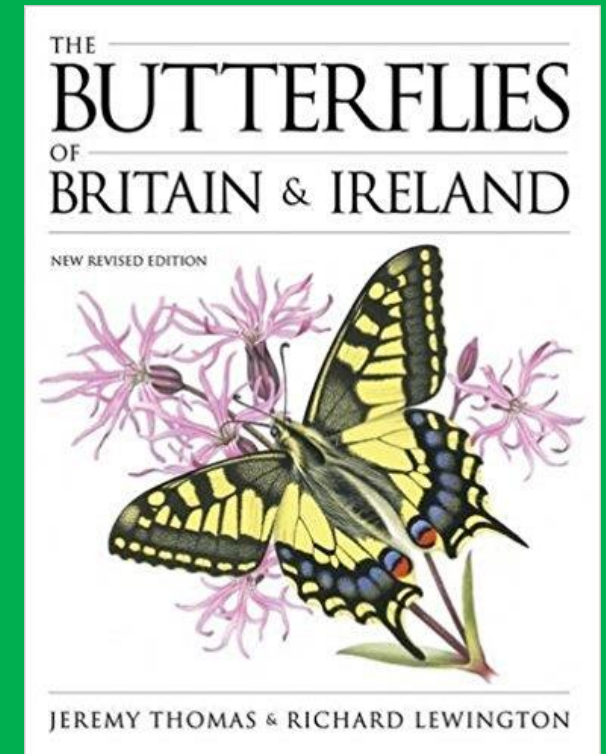


Field Studies Council

**Pocket Guide to the Butterflies  
of Britain and Ireland**



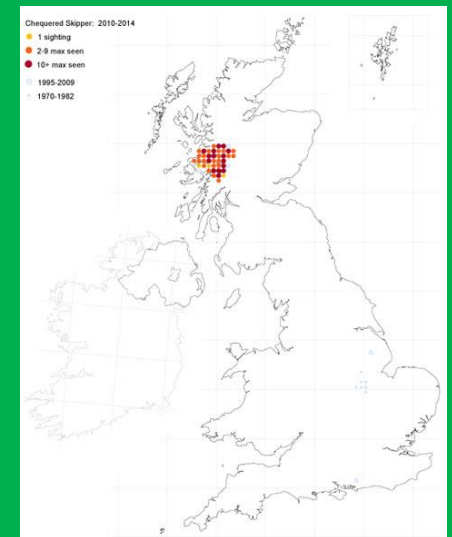
**Butterflies of Britain & Ireland:  
Jeremy Thomas, Richard Lewington**






# i Record Butterflies

- What is it
  - Phone app
  - It has photos to compare
- When to do it
  - Click and count species
  - Use on walks or formal recording
- Report
  - Register and click share your data
- Brilliant at finding your location
- **Google 'i Record Butterflies'**



# Butterfly Conservation Branches

- Sightings page
- Expert help
- Identification Days
- Workparties

Date	Species	Number	Site	Town	Grid ref.	Recorder	Comment	Image
30 Oct 2018	<a href="#">Red Admiral</a>	1	Latterbarrow Nature Reserve	Witherslack	<a href="#">SD440828</a>	David Eastlick	seen by CWT work party, a day of light wind and warm sunny (...)	
30 Oct 2018	<a href="#">Unlisted</a>	1	Gelt Wood	Brampton	<a href="#">NY530584</a>	Paul Kennedy	Found perched on the trunk of a conifer tree in mainly broadleaf (...)	
29 Oct 2018	<a href="#">Red Admiral</a>	1	Barrow park	Barrow in furness	<a href="#">SD204697</a>	Pete Martin	Seen by cenotaph c11am 29/10	
26 Oct 2018	<a href="#">Red Admiral</a>	2	Withheld	Withheld	<a href="#">NY000000</a>	David Eastlick	Withheld	
26 Oct 2018	<a href="#">Small White</a>	1	Garden	Penrith	<a href="#">NY499267</a>	Sarah Mitchell		

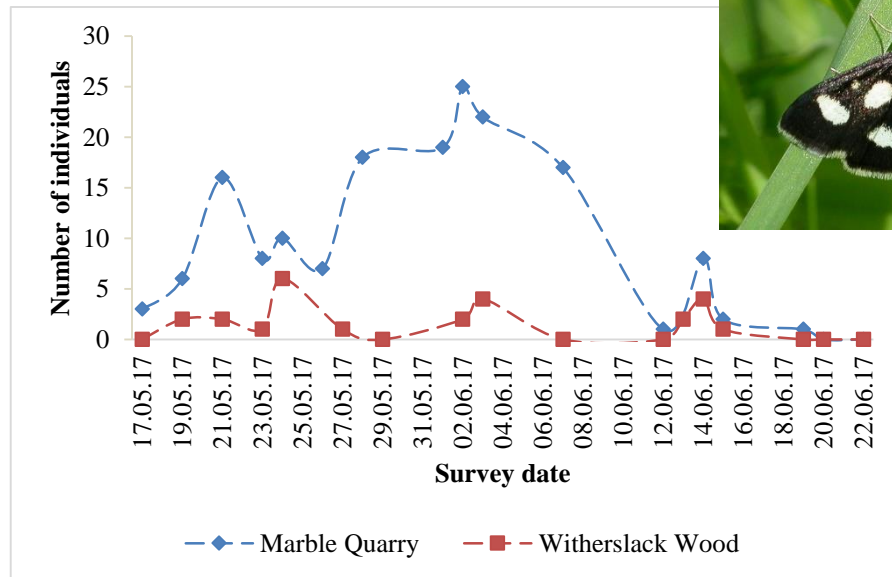
- Google : 'Butterfly ConservationCumbria sightings page'



# *Anania funebris* in South Cumbria

Student: Lizz Willott

Flight period



Movements



Site	Number recorded	Population estimate
MQ	152	~ 500
WW	25	~ 12

Maximum distance moved = 103 m  
Maximum day between recaptures = 17 days

# Trends

Small Pearl-bordered Fritillary

