

Revised Carmarthenshire Local Development Plan 2018 – 2033

Caeau Mynydd Mawr Special Area of Conservation
Revised Supplementary Planning Guidance

EVIDENCE PAPER
DEFINING THE REVISED SPG AREA

DECEMBER 2019



Carmarthenshire County Council

Revised Local Development Plan 2018-2033

Caeau Mynydd Mawr Special Area of Conservation Revised Supplementary Planning Guidance

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1 Introduction

1.1 Background

1.1.1 In December 2014 Carmarthenshire County Council developed and adopted Supplementary Planning Guidance (SPG) to elaborate and consolidate upon the policies and provisions of the Adopted Local Development Plan (LDP) 2006 – 2021 (the current LDP). The current SPG provides a framework for mitigation that could be applied to any relevant development within the current SPG area in recognition of the potential adverse effects on the Caeau Mynydd Mawr Special Area of Conservation (SAC), consistent with The Conservation of Habitats and Species Regulations 2017.

1.1.2 The above approach was based on the principle of using developer contributions to fund habitat mitigation work that would offset the impact of development on the SAC and its special features, thus facilitating the delivery of development. To deliver the necessary habitat mitigation, Carmarthenshire County Council set up the Caeau Mynydd Mawr Special Area of Conservation Marsh Fritillary Project.

1.1.3 The current SPG area is spatially defined and annotated onto the current LDP proposals map. It was robustly defined and based on the best available evidence at the time. In preparation for the 2018- 2033 Revised Local Development Plan (rLDP), the rationale for the current SPG area has been reviewed. This paper sets out how this has been done.

1.1.4 To maintain consistency of approach, the method used for identifying the current SPG area in 2013/14 has been repeated, but now includes up to date habitat surveys conducted in 2018 and Marsh fritillary records from 1994 to 2018. This ensures that the Revised SPG (rSPG) is based on the most up to date information, and best available science. The calculations for the developer contributions are reviewed in a separate paper.

1.2 Objective of this report

1.2.1 The purpose of this report is to review the current SPG area whilst taking into account new records of Marsh fritillaries and most up to date evidence. It sets out the area to which the rSPG will apply; how this area is defined; and how it has been revised from the area previously shown as part of the adopted Carmarthenshire LDP 2006-2021. The methodology section (2.0) sets out how recent survey data has been used to revise the area over which the rSPG applies. The appendices are largely map based and annotate the process used to define the rSPG area.

1.2.2 In identifying the revised SPG area, due regard has been given to the Caeau Mynydd Mawr SAC conservation objectives which state that an area of at least 100 hectares of available habitat, capable of supporting the Marsh fritillary butterfly metapopulation, must be present and adequately linked to the core SAC units.

2.0 Methodology

2.1 Mapping the Revised SPG area

2.1.1 Core and Functional landscape areas are terms developed by Adrian Fowles (Fowles, 2005) to provide a standard protocol which allows comparisons to be made on the quality of a landscape for the Marsh fritillary butterfly. The core landscape area for the current SPG was created by drawing 1km radius circles around each Marsh fritillary record (post 1994 data only) and joining the overlapping circles. The functional landscape was created in the same way using 2km radius circles. Fowles considered that the 2km functional landscape was likely to provide a better fit in terms of likely butterfly dispersal range (Fowles, 2005). However the greater financial outlay of surveying this larger area would have resulted in fewer landscapes being assessed. Therefore it was considered more appropriate to prioritise surveying and assess the 1km core landscape areas.

2.1.2 The original core landscape area for the Caeau Mynydd Mawr area was created by combining the 1km circles around the Marsh fritillary records together with 1km circles around substantial areas of suitable habitat (Carmarthenshire County Council , 2012).

2.1.3 For the 2018 study, an expanded core landscape area was created in the same way, using Marsh fritillary records from 1994 to 2018 (in line with Fowles 2005 guidance on the use of records from within the last 25 years). Habitat considered to be capable of supporting the Marsh fritillary butterfly within these new core landscape areas was surveyed in 2018. In some locations both habitat and Marsh fritillary butterfly larval webs were recorded, highlighting the importance of such areas for the butterfly.

2.2 Datasets

2.2.1 The datasets that have been used to inform the creation of the rSPG boundary are as follows:

- Marsh Fritillary Records
 - Butterfly Conservation records for Carmarthenshire – collated and verified in 2011
 - New records since 2011 from Carmarthenshire County Council and Butterfly Conservation
- Carmarthenshire County Council 2010 Marsh fritillary habitat quality mapping results.

Reference is made to paragraph 3.3 below.

2.3. Creation of the core landscape area

2.3.1 All Marsh Fritillary records before 1994 have been removed from the active data set (in line with Fowles' (2005) methodology) because they are considered to be too old to be relevant, given the ecological and land use changes that have since taken place.

2.3.2 Using a Geographical Information System (GIS) a circle of 1 kilometre radius was drawn around each Marsh fritillary record, creating the core landscape area. This is the area in which surveys for Marsh fritillary habitat were carried out in 2018.

2.3.3 Sites for habitat surveys were then identified through;

- 2005 all Wales Phase 1 habitat survey
- A review of aerial photographs
- Proximity to Marsh fritillary records

2.3.4 For each site, a detailed field assessment of the habitat suitability using Adrian Fowles' methodology (Fowles, 2005) was then conducted and the results recorded on GIS.

2.4 Refining the SPG area

2.4.1 Results from the 2009 and 2018 habitat surveys and locations of Marsh fritillary records (1994-2018) were mapped on GIS. A 100m buffer was created around fields which contain suitable habitat or Marsh fritillary records. The boundary was then drawn around the closest field boundary, road or natural feature (such as a stream or woodland edge).

3.0 Conclusions

3.1 The rSPG area is based on best available science, and reflects the most recent records of the Marsh fritillary butterfly's distribution in this area.

3.2 The maps contained in the appendix set out the results of the preparatory work carried out to define the revised SPG area.

3.3 The rSPG area has been defined using:

- The core landscape area
- Existing Marsh fritillary records (1994- 2018)
- Marsh fritillary habitat quality mapping 2009- 2018

Reference is made to paragraph 2.2.1 above.

3.4 The rSPG area consists of 7,897 ha of land. This is a notable increase from that which was set out in the previous iteration of the SPG that underpinned the previous LDP (2006-2021).

4.0 References

Carmarthenshire County Council . (2012). *Local Development Plan Caeau Mynydd Mawr Special Area Of Conservation Supplementary Planning Guidance: Defining The Area To Be Included Within The SPG, Report Number: B1240150/001/R2.*

Carmarthenshire County Council. (2013). *Local Development Plan Habitat Regulations Assessment Report Volume 1.*

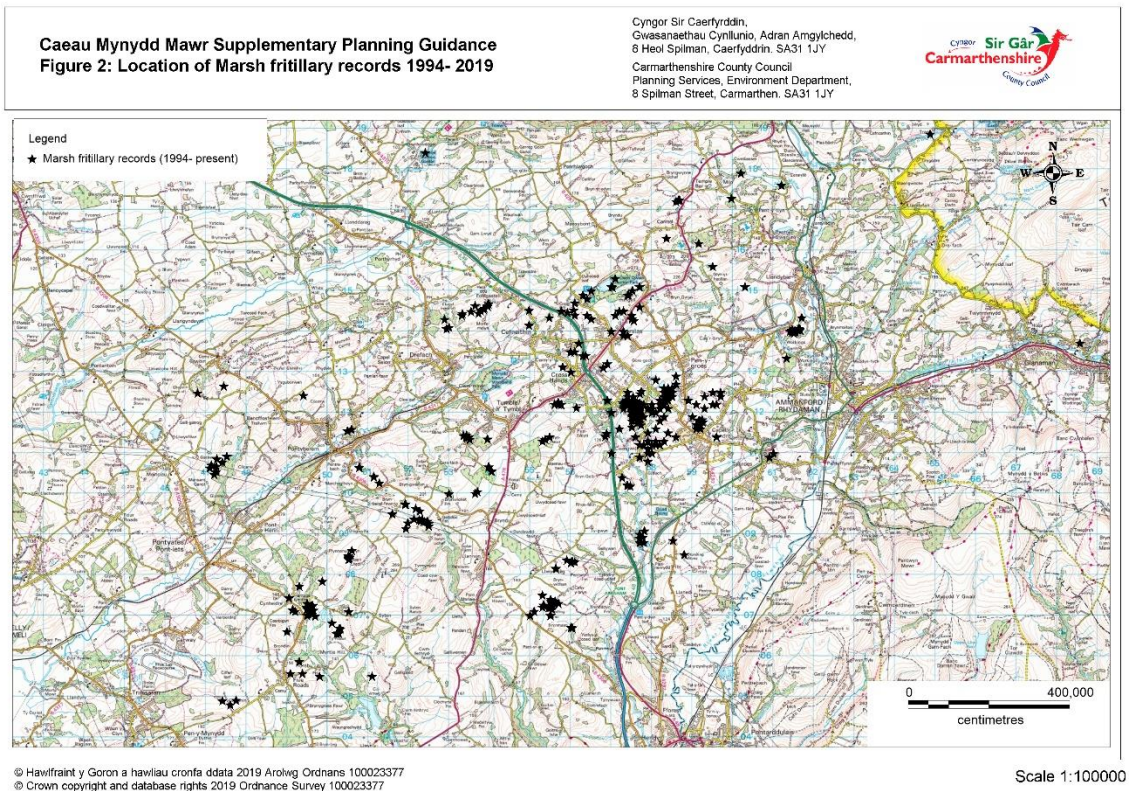
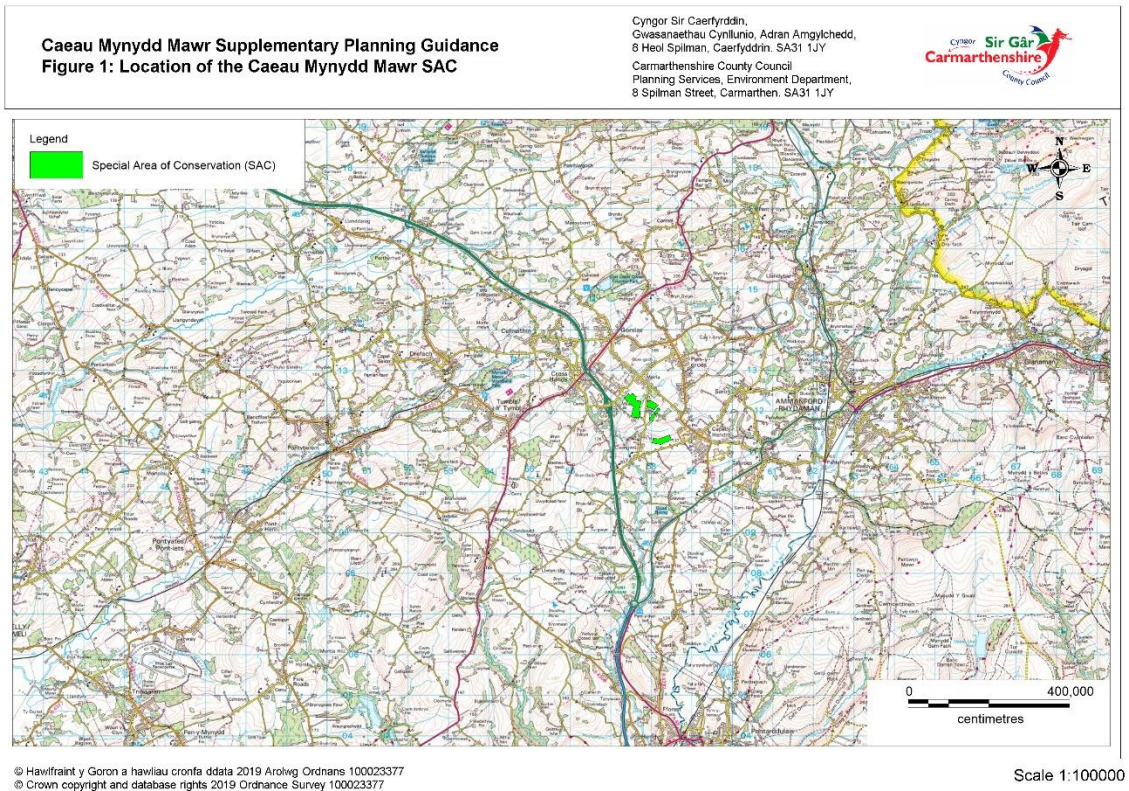
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Carmarthenshire County Council. (December 2018). *Local Development Plan Revised 2018- 2033 Habitats Regulations Assessment Screening Report.*

Fowles, A. (2005). *Habitat Quality Mapping For Marsh Fritillary Populations. CCW Staff Science Report No. 05/5/1.*

Natural Resources Wales. (2016). *Core Management Plan Including Conservation Objectives For Caeau Mynydd Mawr Special Area of Conservation (SAC) – Version 4.*

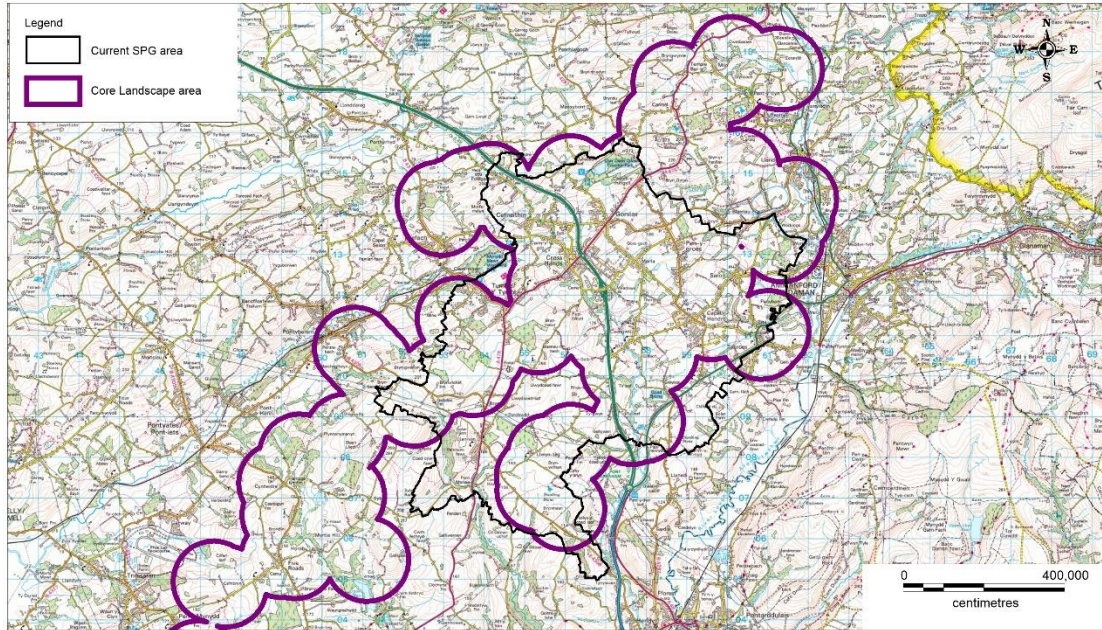
Appendix – figures 1-6.



Revised Carmarthenshire Local Development Plan

Caeau Mynydd Mawr Supplementary Planning Guidance
Figure 3: Marsh fritillary landscape area and current
Supplementary Planning Guidance (SPG) area

Cyngor Sir Caerfyrddin,
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 Planning Services, Environment Department,
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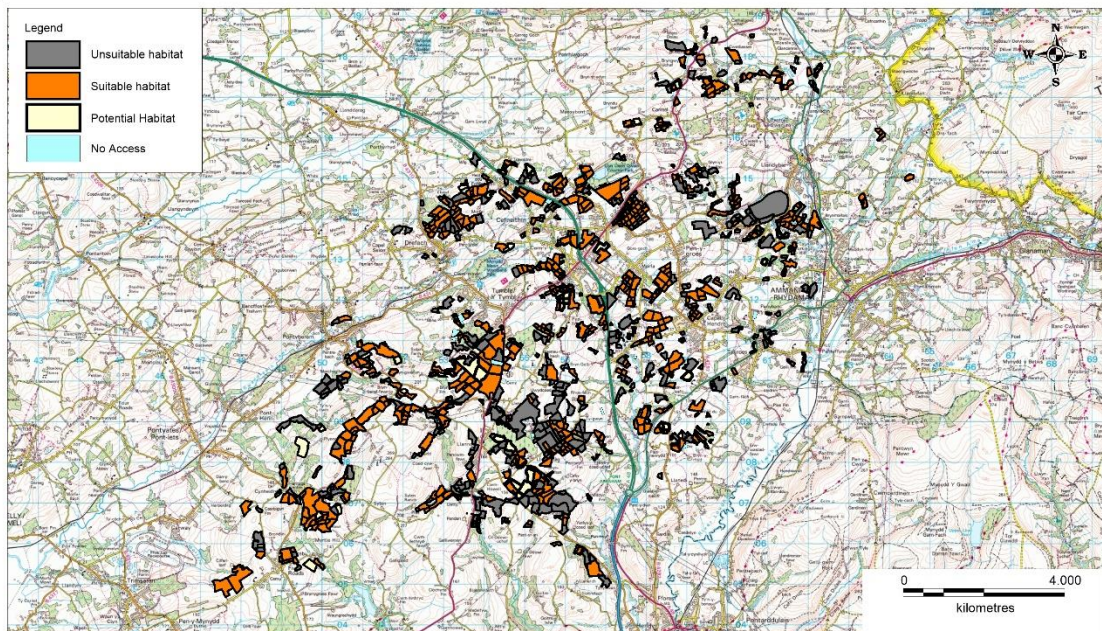


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Figure 4: Results of the Marsh fritillary habitat quality mapping
(2009 and 2018)

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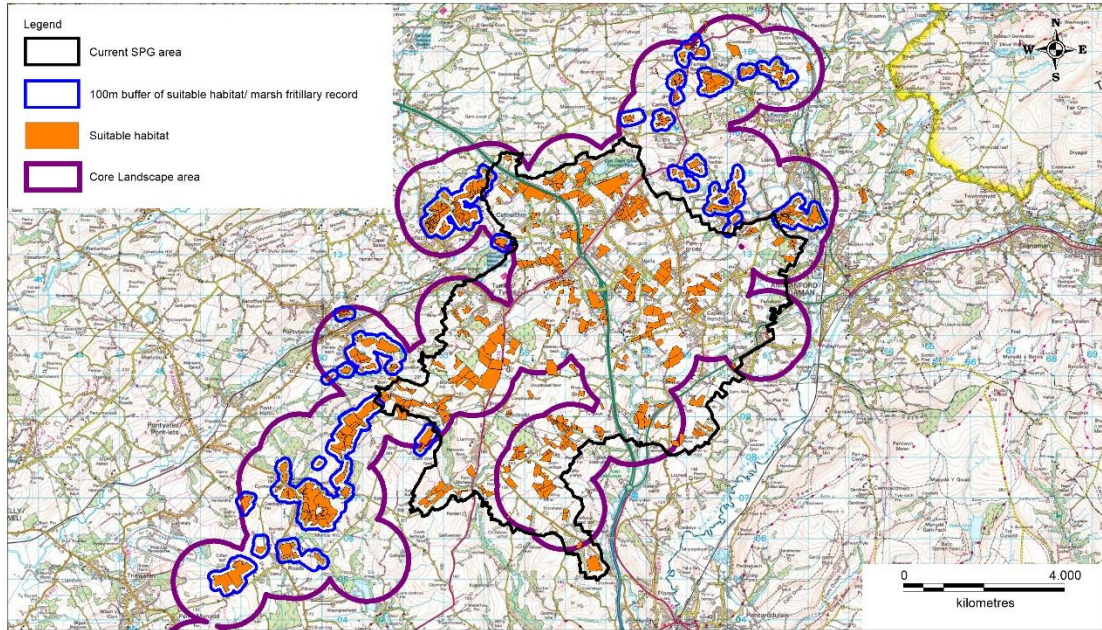
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**Caeau Mynydd Mawr Supplementary Planning Guidance
Figure 5: Data sets used to refine the new SPG boundary**

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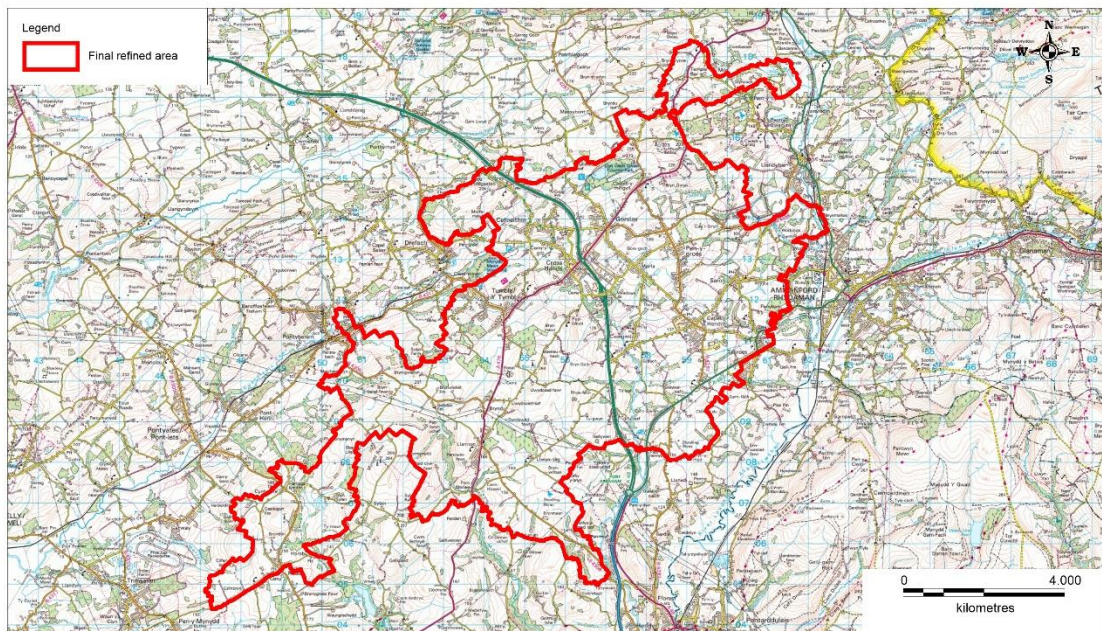


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**Caeau Mynydd Mawr Supplementary Planning Guidance
Figure 6: Final refined boundary for the expanded SPG**

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