

CARMARTHENSHIRE'S STATE OF NATURE – SECTION 7 PRIORITY BUTTERFLIES & MOTHS

Environment (Wales) Act 2016 – Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity.



The species listed in this table have been identified by Welsh Government (WG) as part of a list of species and types of habitat found in Wales that they consider are of key significance to maintain and enhance biodiversity in this country. This list (Section 7 list) is currently under review by WG and Natural Resources Wales (as of 2024).




Public authorities (e.g. WG, councils) must take reasonable steps to maintain and enhance the species and types of habitat included in Section 7 and encourage others to take such steps. By safeguarding these species and habitats, improving their management and raising awareness about them it is hoped that a resilient natural environment in Wales will be sustained into the future.





It is the Section 7 species that the Carmarthenshire Nature Partnership consider for priority action, but other species have been identified for local action where there are few records or where Carmarthenshire has populations where specific action can help conserve/enhance the species.


Associated habitats refers to the relevant Section 7 Priority habitats in Wales

Please refer to the [Butterfly Conservation website](#) for more detailed species description information
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Species	Carmarthenshire overview	Identified priority action in Carmarthenshire
<p><i>Boloria selene</i> - Small Pearl-bordered Fritillary</p>  <p>© Jim Asher Butterfly Conservation</p>	<ul style="list-style-type: none"> • Associated habitat: Lowland Grassland and Heathland/open Woodland • Current status: GB Red list – Vulnerable <p>There has been a marked decline in records in the county. There are very few 'recent' (2015-2019) records for this butterfly in Carmarthenshire</p> <ul style="list-style-type: none"> • Trends in Wales: distribution (1987-2019)-69%↓/ abundance (1992-2019) -76%↓ • Threats: loss of damp, flower-rich grassland to agricultural intensification. <p>To a lesser extent, the cessation of woodland management (which previously created sunny, flowery glades) has also had a negative impact.</p> <ul style="list-style-type: none"> • Butterfly Conservation Priority status in Carmarthenshire: HIGH – quietly disappearing. 	<ul style="list-style-type: none"> • Conservation of remaining diverse grassland areas is a priority for this butterfly and associated wildlife. • Encourage recording of the butterfly. • Prevent woodland planting on identified habitat.
<p><i>Coenonympha pamphilus</i> – Small Heath</p>  <p>© Maggie James</p>	<ul style="list-style-type: none"> • Associated habitat: Upland Grassland/Heathland/Coastal • Current status: GB Red list – Vulnerable <p>• Still relatively frequent throughout the county, but doubtless local losses have occurred due to agricultural intensification.</p> <ul style="list-style-type: none"> • Trends in Wales: distribution (1976-2019) -63%↓/ abundance (1976-2019) +1% • Threats: loss and 'improvement' of semi-natural grasslands and reduction in grazing. <ul style="list-style-type: none"> • Butterfly Conservation Priority status in Carmarthenshire: MEDIUM 	<ul style="list-style-type: none"> • Conserve and manage semi-natural grasslands appropriately. • Prevent loss of further habitat • Targeted habitat restoration to allow for increased connectivity to allow for dispersal into wider landscape
<p><i>Cupido minimus</i> - Small Blue</p>  <p>© George Tordorff</p>	<ul style="list-style-type: none"> • Associated habitat: Coastal/Brownfield (and, now rarely, Lowland Grassland). • Current status: GB Red list – Near Threatened <p>• There are strong populations at the major dune systems at Pembrey and Laugharne/Pendine, as well as lesser numbers at the smaller dune areas such as North Dock Dunes Local Nature Reserve. It only occurs very rarely on brownfield/grassland sites.</p> <ul style="list-style-type: none"> • Trends in Wales: unknown (data deficient - we need more records). <p>UK distribution (1983-2019) -43%, abundance (1978-2019) +5%</p> <ul style="list-style-type: none"> • Threats: loss and 'improvement' of semi-natural grasslands and reduction in grazing. <ul style="list-style-type: none"> • Butterfly Conservation Priority status in Carmarthenshire: Medium/High- Extremely limited distribution in County 	<ul style="list-style-type: none"> • Ongoing management such as sea buckthorn removal and re-introduction of grazing will create open, flower-rich dune grassland to benefit this butterfly. • Encourage planting/sowing of kidney vetch in suitable locations • Encourage recording and monitoring of the butterfly.

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<p data-bbox="233 189 583 225"><i>Erynnis tages</i> - Dingy Skipper</p>  <p data-bbox="233 587 464 617">© George Tordorff</p>	<ul data-bbox="747 189 1465 931" style="list-style-type: none"> • Associated habitat: Coastal/Brownfield/Lowland Grassland • Current status: GB Red list – • Main areas are the hinterland dune grasslands at Pembrey and Laugharne/Pendine, but populations occur elsewhere, with a particular affinity with flower-rich brownfield sites such as the former open-cast site at Ffos-las near Trimsaran. <p data-bbox="747 528 1373 557">Recorded in 2022 at Mynydd Mawr Woodland Park.</p> <ul data-bbox="747 581 1465 931" style="list-style-type: none"> • Trends in Wales: distribution (1992-2019) +6% / abundance (2004-2019) +42% (UK level – significant declines in distribution) • Threats: As with other species that depend on such open conditions, the need to resist inappropriate tree planting and the management of natural succession may be needed. • Butterfly Conservation Priority status in Carmarthenshire: MEDIUM 	<ul data-bbox="1493 189 1957 477" style="list-style-type: none"> • Identify trial management at suitable brownfield sites. • Prevent loss of further habitat. • Targeted habitat restoration to allow for increased connectivity to allow for dispersal into wider landscape.
<p data-bbox="233 955 653 991"><i>Eurodryas aurinia</i> - Marsh Fritillary</p>  <p data-bbox="233 1329 432 1359">© Richard Pryce</p>	<ul data-bbox="747 955 1465 1932" style="list-style-type: none"> • Associated habitat: Lowland Grassland and Heathland. In Wales the butterfly's habitat is usually damp neutral/acidic grassland with the larval host plant, Devil's-bit Scabious. • Current status: GB Red list – Vulnerable • South-west Wales is now one of its strongholds. Most of Carmarthenshire's colonies are aggregated to the south-east of the county, with recently discovered colonies around Brechfa, Amman Valley and Pumsaint. • Recent survey work and habitat assessment has shown that, whilst the size of many colonies may be small, collectively they make a significant contribution to the national population. • Trends in Wales : distribution (1994-2019) +8% abundance(1990-2019) -61%↓ • Threats: The main factor in its decline is inappropriate levels of grazing; in particular a lack of grazing which has allowed pastures to become rank with associated scrub encroachment and loss of habitat and connectivity due to development. • Butterfly Conservation Priority status in Carmarthenshire: HIGH • A landscape-scale project formed to secure and manage marshy grassland habitat for MF around Cross Hands now has 22 sites in management, a total area of 125 ha (2018). 	<ul data-bbox="1493 955 1957 1486" style="list-style-type: none"> • BC Threatened Species Programme 2021-26 species in Wales • Continue to survey new potential Marsh Fritillary habitat and monitor key populations. • Advice and guidance on appropriate grazing. • Scrub control on sites which have been under grazed. • Prevent loss of further habitat. • Targeted habitat restoration to allow for increased connectivity to allow for dispersal into wider landscape (conserve metapopulation)
<p data-bbox="233 1955 583 1991"><i>Hipparchia semele</i> - Grayling</p>  <p data-bbox="233 2329 390 2359">© P. Gadsby</p>	<ul data-bbox="747 1955 1465 2801" style="list-style-type: none"> • Associated habitat: Coastal/Brownfield Sites/Lowland Grassland and Heathland • Current status: GB Red list – Endangered • Favouring more arid grasslands with requisite areas of open, bare ground, the main populations are to be found at the main (and smaller) dune systems along the coast. It also occurs on similarly open early-stage brownfield sites and around rocky areas on inland heathland/upland such as parts of Mynydd Du and Mynydd Llangydeyrn. • Trends in Wales : distribution (1990-2019) -74% abundance(1976-2019) -94% ↓ • Threats: Loss of heathland and semi-natural grassland and reduction in grazing. Habitat degradation due to ecological succession and nitrogen deposition resulting in small populations and increasing isolation. • Inland populations have declined in recent summers (perhaps due to some rainy seasons?). • Butterfly Conservation Priority status in Carmarthenshire: High (<i>currently</i> doing well on coast, but inland has disappeared. Worth considering if HIGH given restricted range) 	<ul data-bbox="1493 1955 1957 2318" style="list-style-type: none"> • Ensure appropriate management of key areas to maintain open, sparse vegetation with abundant fine-leaved grasses and plenty of bare ground. • Scrub control to prevent succession where grazing and natural disturbance is not present. • Encourage further recording and monitoring

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<p><i>Lasiommata megera</i> - Wall</p>  <p>© Maggie James</p>	<ul style="list-style-type: none"> • Associated habitat: Coastal/Brownfield Sites • In Carmarthenshire, another species that favours quite open, sunny conditions such S or SW-facing flower-rich hedgebanks, rocky heathland, brownfield sites and the like. • Current status: GB Red list – Endangered • Declined in the last decade in the county. • Trends in Wales: distribution (1980-2019) -65% / abundance (1976-2019) -52% • Threats: Loss of semi-natural grasslands, reduction in grazing and climatic changes. • Butterfly Conservation Priority status in Carmarthenshire: HIGH restricted to coast, and disappeared inland. 	<ul style="list-style-type: none"> • As above for Grayling • Grazing if possible, to maintain warm microclimate needed for larva. • Encourage recording and further monitoring
<p><i>Pyrgus malvae</i> - Grizzled Skipper</p>  <p>© George Tordorff</p>	<ul style="list-style-type: none"> • Associated habitat: Coastal/Lowland Grassland and Heathland • Almost exclusively limited to stable grasslands on the dune systems of the coast, where its caterpillars depend on wild strawberry plants. Smaller populations are occasionally found inland, on brownfield sites or where the food-plant occurs in reasonable quantity such as on remaining open quarries on the Carboniferous Limestone outcrop. • A very rare species in Wales; the Carmarthenshire colonies are a significant part of the national population. • Current status: GB Red list – Vulnerable • Trends in Wales: Unknown (data deficient) <p>UK distribution (1976-2019) – 48%, abundance (1976-2019) -49%</p> <ul style="list-style-type: none"> • Threats: As with many butterflies, the prevention of succession to scrub or woodland will be a key management need. • Butterfly Conservation Priority status in Carmarthenshire: HIGH 	<ul style="list-style-type: none"> • Ensure appropriate management of sites to maintain a continued supply of sparse grassland with plenty of bare ground, taller vegetation for roosting and scattered scrub for shelter. • Monitor all populations. • Prevent loss of further habitat. • Targeted habitat restoration to allow for increased connectivity to allow for dispersal into wider landscape (conserve metapopulation)
<p><i>Satyrium w-album</i> - White Letter Hairstreak</p>  <p>© Jim Asher Butterfly Conservation</p>	<ul style="list-style-type: none"> • Associated habitat: Woodland/Farmland/Parkland. • Current status: GB Red list – Vulnerable • The white-letter hairstreak is a local species in Carmarthenshire, this reflecting the distribution of elms in the county. In Carmarthenshire, mainly coastal and the Tywi Valley, but unless dedicated searches are made, this usually tree-top butterfly is rarely encountered. It is probably badly under-recorded and it will occur at elm-rich hedgerows and woodland throughout the county. • Trends in Wales: Unknown (data deficient) <p>UK distribution (1991-2019) -5%, abundance (1976-2019) -78%</p> <ul style="list-style-type: none"> • Threats: Sparse Elm regrowth inhibiting colonisation. • Butterfly Conservation Priority status in Carmarthenshire: Medium 	<ul style="list-style-type: none"> • It requires no particular management, and it survived the Dutch Elm Disease of the 1970s (with local elms recovering well). • A data deficient species – encourage local record Could target an Elm Tree search in first instance to improve knowledge in County, and then look for WLH guided by this. • Sympathetic woodland management (glades/rides/soft edge habitat to provide increased resources)
<p><i>Thecla betulae</i> - Brown Hairstreak</p>  <p>© Richard Smith</p>	<ul style="list-style-type: none"> • Associated habitat: Farmland (hedgerows) • Current status: GB Red list – Vulnerable <p>Carmarthenshire has roughly 60% of the recently (since 1995) recorded sites in Wales. Its known range runs roughly north of the line of the main A40 road, with a handful of sites marginally to the south, mostly in Tywi valley.</p> <ul style="list-style-type: none"> • The best-known concentrations are in the Tywi and Teifi valleys and their tributaries. • Trends in Wales: distribution it was recorded as breeding in 22 10km grid squares in the period 2005-2009 but only in 13 during 2015-2019./population (2004-2019) -39% • Threat: A highly threatened species. The principal factor thought to be affecting the species is the annual flailing of hedges and trimming of young and sucker growth inside 	<ul style="list-style-type: none"> • Butterfly Conservation volunteers have undertaken annual egg surveys for more than 10 years and work with landowners on management of sites for this butterfly. • Continue to support volunteer egg counts/habitat management in the county. • Encourage Blackthorn in hedgerow planting schemes. • Raise awareness of rotational cutting regimes. • Prevent loss of further habitat • Targeted planting to encourage natural dispersal

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	<p>field boundaries, changes in woodland management, including loss of woodland edge habitat.</p> <ul style="list-style-type: none"> The Tywi valley population has diminished significantly – likely due to loss of egg laying habitat because of hedge flailing. Butterfly Conservation Priority status in Carmarthenshire: HIGH 	
<p>Section 7 Moth Species in Carmarthenshire that require action NB Most current S7 moth species are listed as ‘Research only’ and are not included here. The species included here are S7 species recorded in the county where positive local action could help to maintain and enhance their populations. For other moth species moth and submitting records is the priority action.</p>		
<p><i>Anania funebris</i> White spotted sable</p>	<ul style="list-style-type: none"> Associated habitat: associated with a sole foodplant, Goldenrod. Can be found in woodland glades and margins, also rough hillsides and cliffs, particularly on limestone. Current status: Historically widespread this day-flying moth is now only recorded from two sites – Pembrey Forest and Carmel Ridge (last records 2017/18). Trends in Wales: unknown; declined in the 20th century due to loss of habitat Threat: Goldenrod is apparently declining, probably more so in woodland and scrubby areas where it disappears as conditions become too shady. Butterfly Conservation Priority status in Carmarthenshire: HIGH 	<ul style="list-style-type: none"> Re-survey of Carmel Cairns Grid Ref. SN583157 (BC Priority Landscape: Carmarthenshire Limestone Ridge). Approximately 5m north-west of Ammanford and just south of Carmel village Encourage appropriate management to widen rides/glades to encourage LHP.
<p><i>Hemaris tityus</i> Narrow-bordered Bee Hawk-moth</p>	<ul style="list-style-type: none"> Associated habitat: Wet grassland Current status: Rarely recorded though with records from several sites in the last few years, including Pembrey Forest (where breeding was confirmed), Mynydd Sylen and Mynydd Mawr Woodland Park. Trends in Wales: unknown; declined historically though some evidence of recent recovery with records from several new sites in the last 5 years Threat: Loss and fragmentation of habitat - damp species-rich grassland. Shares the same foodplant, Devil’s-bit Scabious, as Marsh Fritillary; also threatened by inappropriate management (e.g. sheep grazing). Butterfly Conservation Priority status in Carmarthenshire: HIGH 	<ul style="list-style-type: none"> Encourage a mosaic of grazing on sites as this species requires shorter swards than the Marsh Fritillary (and shares the same LHP).
<p><i>Adscita statices</i> The Forester</p>  <p>© J. Baker</p>	<ul style="list-style-type: none"> Associated habitat: Wet grassland Current status: Occasionally recorded in the county with a reasonable number of records since 2000 of this day-flying moth. There was a new record from Mynydd Mawr Woodland Park in May 2022. Trends in Wales: unknown; declined historically due to loss of wet grassland Threat: Loss and fragmentation of habitat - damp species-rich grassland; also inappropriate management (doesn’t tolerate heavy grazing) Butterfly Conservation Priority status in Carmarthenshire: HIGH 	<ul style="list-style-type: none"> Encourage public records - search in damp meadows with Common and Sheep’s Sorrel Raise awareness – day flying species. Appropriate grazing of grassland habitat.