

Wales Biodiversity Action Plan Lepidoptera Targets

| Species reference codes and names | | Wales Species Lead Partner | Target type | Target number | Target text | Target units | 2005 Baseline | 2010 | 2015 | 2020 | 2025 | Additional Comments | Monitoring |
|-----------------------------------|-----------------------|---------------------------------|------------------------|-----------------|-------------|---|-------------------------|-------|-------|-------|-------|--|--|
| 2006 | Adscita stictices | The Forester | Butterfly Conservation | Range | T1 | Maintain current range | Site(s) / Population(s) | 16.00 | 16.00 | 16.00 | 16.00 | Maintain continuity and enhance amount of suitable habitat. | Encourage survey to gain a better understanding of distribution. Need to identify key sites and monitor. |
| 2032 | Anania funebris | White-spotted Sable Moth | Butterfly Conservation | Range | T1 | Maintain current range | Site(s) / Population(s) | 14.00 | 14.00 | 14.00 | 14.00 | Management and disturbance to encourage a plentiful supply of golden-rod. | Encourage survey to gain a better understanding of distribution. |
| 108 | Argynnis adippe | High Brown Fritillary | Butterfly Conservation | Range | T1 | Maintain the core range of the species in the UK. | Site(s) / Population(s) | 2.0 | 1.0 | 1.0 | 1.0 | Key areas in Wales: Montgomeryshire, Vale of Glamorgan and surrounding LBAPs. | Annual transects and timed counts within each network, with at least 1 transect in each network. |
| 108 | Argynnis adippe | High Brown Fritillary | Butterfly Conservation | Range | T2 | Maintain viable populations within the existing 19 networks. | Site(s) / Population(s) | 2.0 | 1.0 | 1.0 | 1.0 | Key areas in Wales: Montgomeryshire; Vale of Glamorgan and surrounding LBAPs. | Annual transects and timed counts within each network, with at least 1 transect in each network. |
| 108 | Argynnis adippe | High Brown Fritillary | Butterfly Conservation | Population Size | T3 | Increase the number of occupied sites within each network. | Site(s) / Population(s) | 2.0 | 2.0 | 4.0 | 7.0 | Habitat management of sites adjacent and near to current sites is required to ensure stability in extant populations and allow population expansion. | Targetted surveys on a 5 year basis. Report the total number of sites. |
| 151 | Boloria euphrosyne | Pearl-bordered Fritillary | Butterfly Conservation | Range | T1 | Maintain the core range of the species in the UK. | Occupied 10 km squares | 7.0 | 7.0 | 7.0 | 7.0 | Key areas in Wales: Montgomeryshire, Denbighshire, Ceredigion coastline. England/Wales: Shropshire/Montgomeryshire border. | Annual transects, one in each network, and targeted national surveys on a 5 year basis. |
| 151 | Boloria euphrosyne | Pearl-bordered Fritillary | Butterfly Conservation | Range | T2 | Maintain viable networks (metapopulations) within 4 core regions. | Site(s) / Population(s) | 3.0 | 3.0 | 3.0 | 3.0 | Persists within a dynamic network of sites as a metapopulation, conservation must be targeted at a network scale. | Targetted surveys on a 5 year basis. Reporting will be based on the number of core regions in which viable networks have been maintained in each county. |
| 151 | Boloria euphrosyne | Pearl-bordered Fritillary | Butterfly Conservation | Range | T3 | Increase the number of occupied sites within each network. | Site(s) / Population(s) | 5.0 | 7.0 | 9.0 | 9.0 | Increase the number of occupied sites within each network. To maintain and increase network viability new habitat must be restored/created to allow colonisation. | Targetted surveys on a 5 year basis. |
| 2088 | Boloria selene | Small Pearl-bordered Fritillary | Butterfly Conservation | Range | T1 | Maintain core range of the species. | Occupied 10 km squares | 115.0 | 115.0 | 115.0 | 115.0 | Ensure known sites are managed appropriately. Target through AES and BWV. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2164 | Chesias rufata | Broom-tip | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 12.00 | 12.00 | 12.00 | 12.00 | Ensure continuity of hostplant and enhance amount available in appropriate habitats. Target through AES. | Encourage survey to gain a better understanding of distribution. |
| 2184 | Coenonympha tullia | Large Heath | Butterfly Conservation | Range | T1 | Maintain core range of the species. | Occupied 10 km squares | 14.0 | 14.0 | 14.0 | 14.0 | Ensure known sites are managed appropriately. Target through AES. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2196 | Cossus cossus | Goat Moth | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 18.00 | 18.00 | 18.00 | 18.00 | Conservation of this species will help conserve a suite of species associated with sap runs. | Encourage survey to gain a better understanding of distribution. Need to undertake surveillance at key sites. |
| 2203 | Cupido minimus | Small Blue | Butterfly Conservation | Range | T1 | Maintain core range of the species. | Occupied 10 km squares | 30.0 | 30.0 | 30.0 | 30.0 | Ensure known sites are managed appropriately. Target through AES. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2203 | Cupido minimus | Small Blue | Butterfly Conservation | Range | T2 | Increase the amount of occupied habitat by 10% within core areas by | Occupied 1 km squares | 69.0 | 70.0 | 75.0 | 78.0 | Some site-specific action necessary. | Targetted single species transects. |
| 2244 | Entephria caesiata | Grey Mountain Carpet | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 27.00 | 27.00 | 27.00 | 27.00 | Ensure continuity of hostplant and enhance amount available in appropriate habitats. Target through AES. | Encourage survey to gain a better understanding of distribution. |
| | Eriopygodes imbecilla | The Silurian | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 4.00 | 4.00 | 4.00 | 4.00 | Wales has only known breeding locality in UK. Larvae only recently found in wild on bilberry on moorland plateau. Threat from windfarm development. | Full extent of potential breeding habitat at known locality needs mapping and undertake systematic larval searches. |
| 2255 | Erynnis tages | Dingy Skipper | Butterfly Conservation | Range | T1 | Maintain core range of the species. | Occupied 10 km squares | 70.0 | 70.0 | 70.0 | 70.0 | Ensure known sites are managed appropriately. Target through AES. Some site-specific action necessary. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2255 | Erynnis tages | Dingy Skipper | Butterfly Conservation | Range | T2 | Increase the amount of occupied habitat by 10% within core areas by | Occupied 1 km squares | 213.0 | 220.0 | 228.0 | 234.0 | Some site-specific action necessary. | Targetted single species transects. |
| 2259 | Eulithis mellinata | The Spinach | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 25.00 | 25.00 | 25.00 | 25.00 | Combined action on fruit trees and bushes in gardens, allotments etc. | Encourage survey of urban and suburban fruit trees and bushes. |
| 300 | Euphydryas aurinia | Marsh Fritillary | Butterfly Conservation | Range | T1 | Maintain the core range of the species. | Occupied 10 km squares | 53.0 | 53.0 | 53.0 | 53.0 | The core range is defined as viable 10km square records | BNM database |
| 300 | Euphydryas aurinia | Marsh Fritillary | Butterfly Conservation | Range | T2 | Increase the amount of occupied habitat from current 160 1km squares to 176 1km squares within core areas by 2020. | Occupied 1 km squares | 160.0 | 165.0 | 170.0 | 176.0 | To make each metapopulation viable in the long term nearby unoccupied habitat should be targeted for restoration management. This should aim to restore habitat on 8 sites within 8 1km squares. In Wales core areas are Llyn, Harlech, Tir Stent, Llaw-cwr, Blaeddaw, Yerboston, Gower, Myrdd Mawr, Pencoe and Ely Valley, Aberbargoed and Talgias. | Larval web surveys repeated on a 5 year basis. |
| 2297 | Graphiphora augur | Double Dart | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 40.00 | 40.00 | 40.00 | 40.00 | Feeds on range of broadleaved trees and in hedge margins. Target through AES. | Encourage survey to gain a better understanding of distribution. |
| 358 | Hemaris tityus | Narrow-bordered Bee Hawk-moth | Butterfly Conservation | Range | T1 | Ensure the populations of the narrow-bordered bee hawk moth are maintained on all extant | Site(s) / Population(s) | 6.00 | 7.00 | 7.00 | 7.00 | Ensure autecological studies, surveillance of all sites at least once every 5 years, and site liaison and site management is undertaken where appropriate. | Annual surveillance of adults or larvae on selected key sites and on all other sites at least once every 5 years. |
| 358 | Hemaris tityus | Narrow-bordered Bee Hawk-moth | Butterfly Conservation | Range | T2 | Ensure that an additional 1 viable population (on 2005 figure) occur within the historic range by | Site(s) / Population(s) | 0.00 | 0.00 | 1.00 | 1.00 | Identify and encourage survey of potential sites as this species is potentially under-recorded and there may be colonies that are overlooked. | Undertake surveillance of larvae and/or adults on any additional sites once every 5 years, though ensure annual surveillance for the first 3 years. |
| 2334 | Hipparchia semele | Grayling | Butterfly Conservation | Range | T1 | Maintain the range of the species. | Occupied 10km squares | 124.0 | 124.0 | 124.0 | 124.0 | Ensure appropriate management of known sites. Target through AES. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2334 | Hipparchia semele | Grayling | Butterfly Conservation | Research | R1 | | | | | | | Determine reasons for long term decline, particularly at coastal sites. | |
| 389 | Ideaea dilutaria | Silky Wave | Butterfly Conservation | Range | T1 | Ensure that populations are maintained on all extant sites. | Site(s) / Population(s) | 2.00 | 2.00 | 2.00 | 2.00 | Key Areas in Wales: South Gower and Great Ormes Head. Site liaison and ensure continuity of habitat. | Surveillance should incorporate measuring of both habitat and species attributes, e.g. assessing the amount of potentially suitable habitat along with distribution/counts of adults on each of the known sites at least once every 2 years. Survey of any recently managed areas on these sites for the moth must be ensured. |
| 389 | Ideaea dilutaria | Silky Wave | Butterfly Conservation | Range | T2 | Increase the amount of potentially suitable breeding habitat on each of the two extant sites (as of 2005) by at least 0.25ha by 2010. | Hectares | 0.00 | 0.50 | 1.00 | 2.00 | Undertake management to increase the amount of habitat/foodplant on each of the selected sites and ensure a continuity of this habitat. Ensure habitat and species attributes are measured every year on all sites. | Report the number of sites at which the habitat has been increased by at least 0.25ha. Surveillance should incorporate measuring of both habitat and species attributes, e.g. assessing the amount of potentially suitable habitat along with distribution/counts of adults on any newly created habitat every year. |
| 2363 | Lasiommata megera | Wall | Butterfly Conservation | Range | T1 | Maintain the range of the species. | Occupied 10km squares | 183.0 | 183.0 | 183.0 | 183.0 | Ensure known sites are managed appropriately. Target through AES. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2374 | Leptidea sinapis | Wood White | Butterfly Conservation | Range | T1 | Maintain current range | Site(s) / Population(s) | 3.0 | 3.0 | 3.0 | 3.0 | Site specific action. Woodland ride management on 2-3 year cycle. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2381 | Limenitis camilla | White Admiral | Butterfly Conservation | Range | T1 | Maintain current range | Site(s) / Population(s) | 9.0 | 9.0 | 9.0 | 9.0 | Site specific action. Ensure appropriate management of woodlands adjacent to where found. Target through BWV. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |

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| 430 | Lycia zonaria subsp. britannica | Belted Beauty | Countryside Council for Wales | Range | T1 | Ensure the populations of the belted beauty are maintained on all extant sites. | Site(s) / Population(s) | 1.00 | 1.00 | 1.00 | 1.00 | | Ensure habitat and species attributes are measured every year on all known sites. Undertake autecology studies. Identify and encourage survey of potential sites. Undertake site liaison and ensure continuity of habitat. | Surveillance should incorporate measuring of both habitat and species attributes, e.g. assessing the amount of potentially suitable habitat along with distribution/counts of adults/larvae on each of the known sites every year. Survey any potential sites for the moth. |
| 430 | Lycia zonaria subsp. britannica | Belted Beauty | Countryside Council for Wales | Range | T2 | Increase the amount of potentially suitable habitat by at least 0.1ha by 2010. | Hectares | 0.00 | 0.10 | 0.20 | 0.40 | | Undertake site liaison and appropriate management. Also continue to identify potential sites and encourage survey to look for further sites. Undertake larval survey to assess suitability of newly created habitat. | Surveillance should incorporate measuring of both habitat and species attributes, e.g. assessing the amount of potentially suitable habitat along with distribution/counts of larvae on any newly created habitat every year. |
| 2401 | Macaria wauaria | V-moth | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 10.00 | 10.00 | 10.00 | 10.00 | | Combined action on fruit trees and bushes in gardens, allotments etc. | Encourage survey of urban and suburban fruit trees and bushes. |
| 458 | Minoa murinata | Drab Looper | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 5.00 | 5.00 | 5.00 | 5.00 | | Associated with Wood Spurge and found in open woodland situations. | Encourage surveillance of key sites and survey to fully determine distribution. |
| 458 | Minoa murinata | Drab Looper | Butterfly Conservation | Range | T2 | Increase the amount of suitable breeding habitat within 200m at each known site by at least 0.05ha by 2015. | Hectares | 0.00 | 0.00 | 0.35 | 1.40 | 2.80 | Site specific advice may be needed to maintain populations. | Monitor the colonisation of newly disturbed ground by Wood Spurge. |
| 2492 | Perizoma albulata subsp. albulata | Grass Rivulet | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 53.00 | 53.00 | 53.00 | 53.00 | | Flagship species of unimproved grassland. Target through AES. | Encourage survey to gain a good understanding of distribution. Use as focal species for surveillance of unimproved grassland sites. |
| 522 | Plebejus argus | Silver-studded Blue | Butterfly Conservation | Range | T1 | Maintain the current range | Occupied 10 km squares | 8.0 | 8.0 | 8.0 | 8.0 | | Key areas in Wales: Conwy, Anglesey, Snowdonia and Pembrokeshire. | Targeted subsample surveys across range at least every five years. |
| 522 | Plebejus argus | Silver-studded Blue | Butterfly Conservation | Range | T2 | Expand distribution within current range. | Occupied 1 km squares | 54.0 | 54.0 | 56.0 | 59.0 | | Target is to expand distribution within current geographical range, encouraging expansion of core areas into restored habitat. | Targeted survey of restored habitats at least every five years. |
| 2555 | Pyrgus malvae | Grizzled Skipper | Butterfly Conservation | Range | T1 | Maintain the current range. | Occupied 10km squares | 16.0 | 16.0 | 16.0 | 16.0 | | Ensure appropriate management at known sites. Target through AES and BWV. | Encourage the monitoring at key sites, co-ordinate data and produce Wales trend every five years. |
| 2555 | Pyrgus malvae | Grizzled Skipper | Butterfly Conservation | Range | T2 | Expand distribution within current range to increase number of occupied 1km by 10% by 2020 | Occupied 1km squares | 44.0 | 44.0 | 46.0 | 48.0 | | Increase the number of occupied sites within each network: To maintain and increase network viability new habitat must be restored/created to allow colonisation. | Targeted survey of restored habitats at least every five years. |
| 549 | Rheumaptera hastata | Argent and Sable | Butterfly Conservation | Range | T1 | Ensure the populations are maintained on all extant sites. | Site(s) / Population(s) | 2.00 | 2.00 | 2.00 | 2.00 | | Ensure surveillance for larvae/adults is undertaken. Undertake autecological studies. Ensure liaison with site owners and managers, and ensure management undertaken where necessary. | Ensure surveillance of adults or larvae undertaken at selected key sites every year. Ensure surveillance for the species on all other extant sites at least once every 3 years. |
| 549 | Rheumaptera hastata | Argent and Sable | Butterfly Conservation | Range | T2 | Ensure that one additional viable population (on 2005 figure) occurs within the historic range by 2020. | Site(s) / Population(s) | 0.00 | 0.00 | 0.00 | 1.00 | | Identify and encourage survey of potential sites as this species is potentially under-recorded and there may be colonies that are overlooked. Ensure management undertaken where appropriate. Priority should concentrate on enhancing the populations on the extant sites for natural recolonisation. | Surveillance for larvae/adults at each site annually for the first 3 years and then once every 3 years. |
| 2586 | Satyrrium w-album | White Letter Hairstreak | Butterfly Conservation | Range | T1 | Maintain the current range. | Occupied 10km squares | 29.0 | 29.0 | 29.0 | 29.0 | | Ensure appropriate management at known sites. Target through AES and BWV. | Encourage surveillance at key sites, co-ordinate data and produce Wales trend every five years. |
| 2586 | Satyrrium w-album | White Letter Hairstreak | Butterfly Conservation | Range | T2 | Expand distribution within current range to increase number of occupied 1km by 10% | Occupied 1km squares | 49.0 | 49.0 | 51.0 | 54.0 | | Encourage appropriate management of hedgerows with Elm. | Targeted survey of restored habitats at least every five years. |
| 568 | Scotopteryx bipunctaria | Chalk Carpet | Butterfly Conservation | Range | T1 | Maintain current range | Site(s) / Population(s) | 14.00 | 14.00 | 14.00 | 14.00 | | Associated with early successional stages and broken soils on calcareous habitats. Advice may be needed to maintain a continuity and enhance these conditions. | Surveillance of adults at known sites every three years. |
| | Synanthedon scoliaeformis | Welsh Clearwing | Butterfly Conservation | Range | T1 | Ensure the populations are maintained on all extant sites. | Occupied 10km squares | 11.00 | 11.00 | 11.00 | 11.00 | 11.00 | Uses mature birch trees in open situations. Target through AES and BWV. | Annual surveillance of adults/cocoons/exuviae on at least 5 sites. Surveillance for adults/cocoons/exuviae on remaining sites at least every three years. This should incorporate a measure of both habitat and species attributes, e.g. assessing the number of suitable birch trees and their condition along with counts of adults/cocoons/exuviae. |
| | Synanthedon scoliaeformis | Welsh Clearwing | Butterfly Conservation | New target type | T2 | Increase number of suitable trees or small groups of trees in vicinity of occupied trees | Site(s) / Population(s) | 0.00 | 5.00 | 10.00 | 15.00 | 20.00 | Establish Action Group to liaise with site managers and landowners. Encourage planting of single or small groups of Downy birch in appropriate landscape locations in the vicinity of occupied trees. If young birches are already present they could be managed e.g. clearing others trees from around them, so they will be suitable in future. | Assess growth and condition of replacement trees every five years. |
| | Synanthedon scoliaeformis | Welsh Clearwing | Butterfly Conservation | Range | T3 | Extend range | Occupied 1km squares | 0.00 | 1.00 | 2.00 | | | Encourage planting of single or small groups of Downy birch in appropriate landscape locations on landholdings adjacent to those with occupied trees. If young birches are already present they could be managed e.g. clearing others trees from around them, so they will be suitable in future. | Assess growth and condition of replacement trees every five years. |
| 2654 | Thecla betulae | Brown Hairstreak | Butterfly Conservation | Range | T1 | Ensure populations are maintained in all extant sites | Occupied 10 km squares | 30.0 | 30.0 | 30.0 | 30.0 | | Ensure annual monitoring on at least 10 key sites, site liaison and site management is undertaken at key sites throughout range. | Annual surveillance of eggs at 10 key sites throughout range. This should incorporate a measure of both habitat and species attributes, e.g. assessing the amount of suitable habitat along with distribution/counts of eggs. |
| 2654 | Thecla betulae | Brown Hairstreak | Butterfly Conservation | New target type | T2 | Increase the length of good condition hedges around extant sites. | Kilometres | 32.0 | 37.0 | 40.0 | 50.0 | 60.0 | 43km of average condition hedge has been identified. Encourage improved management of these hedges and hedges adjacent to existing colonies to bring in to suitable condition for the species. | Habitat assessment and, where appropriate, surveillance of the species on adjacent sites at least once every 5 years, though ensure presence for at least the first 3 years. |
| 2670 | Trichiura crataegi | Pale Eggar | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 16.00 | 16.00 | 16.00 | 16.00 | | Feeds on range of broadleaved trees and in hedge margins. Target through AES. | Encourage survey to gain a better understanding of distribution. |
| 636 | Xestia ashworthii | Ashworth's Rustic | Butterfly Conservation | Range | T1 | Maintain current range | Occupied 10km squares | 21.00 | 21.00 | 21.00 | 21.00 | | Restricted to North West Wales. Larvae appear to prefer low growing plants on rocky ground. | Encourage survey to gain a better understanding of distribution. Undertake surveillance at series of key sites. |