CARMARTHENSHIRE NATURE RECOVERY PLAN – LICHENS

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 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 (S7 list) is currently under review by WG and Natural Resources Wales. 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.

Please refer to [http://wales-lichens.org.uk/](http://wales-lichens.org.uk/) for more detailed species description information

All photos used with permission. Please note that some are taken at a high magnification.

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<th>HABITAT/ CARMARTHENSHIRE SITES</th>
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| *Bacidia incompta* | • Trunks of old ‘basic’ trees, especially elm (*Ulmus*), often in wound tracks.  
• Castle woods, Llandeilo - last recorded 1981.  
• Found on two horse chestnut trees at Dinefwr Park in autumn 2013 by Neil Sanderson | • Identify and promote records of mature elms for survey by lichenologists.  
• Mature elm in Cwrt Henri churchyard – investigate. |
| Photo: © Alan Orange | | |
| *Buellia hyperbolica* | • Old parkland oaks.  
• Glan Bran Deer Park, Cynghordy - last recorded 1981.  
• Dinefwr Park - last recorded in 2012 - by Neil Sanderson. It was the largest population recorded in Britain. | • Identify parkland sites for survey.  
• Resurvey Glan Bran Deer Park if possible.  
• Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the Critical Level for ammonia from intensive agricultural practices. |
| Photo: ©Alan Orange | | |
| *Caloplaca herbidella* | • On old trees in wood pasture.  
• Glan Bran Deer Park, Cynghordy - last recorded 1995. | • Identify parkland sites for survey.  
• Resurvey Glan Bran Deer Park if possible.  
• Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the Critical Level for ammonia from intensive agricultural practices. |
| Photo: ©Ray Woods | | |
| *Collema fragile* | • Limestone walls and rocks.  
• Dinefwr Park - last recorded 1985. | • Survey suitable sites. |
<p>| Photo: ©Alan Orange | | |</p>
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| Collema fragrans             | • Nutrient-enriched bark, especially elm and sycamore.  
                                 • Dinefwr Park – Castle Woods - last recorded 1994                                                                 | • Survey suitable sites.                                                                 |
| Photo: © Alan Orange         |                                                                                                         |                                                                                         |
| Graphina paucioculata        | • Confined to the smooth bark, mainly on branches, of broadleaved trees in very sheltered ancient woodland and old willow carr in hyperoceanic high rainfall areas.  
                                 Sites are typically within sound of running water, very moist, consistently humid, but fairly well lit and the species does not tolerate heavy shade. It is markedly calcifuge, occurring on leached acid bark.  
                                 • 2014 – found in a side valley north of Abergorlech.                                                                 | • Survey suitable sites.  
                                 • It is scattered through Cwm Marlais (Brechfa Forest) which is listed as pSSSI by NRW, and notifying this as SSSI should help the species (and all the Lobarion lichens there)                                                                 |
| Photo: © Alan Hale           |                                                                                                         |                                                                                         |
| Lecanora sublivescens        | • In Wales it is most frequently found on ancient oak trees and rarely on ash, usually in pasture woodlands or in open fields or in hedgerows.  
                                 • 1985–95 Cynghordy, Dinefwr, Talley lakes.  
                                 • 2010, Dinefwr. The tree it was found on had fallen and the lichen was lost by 2013 and is now considered extinct at Dinefwr.                                                                 | • Survey suitable areas of parkland in the Tywi Valley for this species.                  |
| Photo: © Ray Woods           |                                                                                                         |                                                                                         |
| Parmelinopsis horrescens     | • Prefers smooth neutral–acidic bark of trees such as birch, rowan, alder and young oak in sheltered humid woodlands.  
                                 • Cwmdu – 2004, 2014 - side valley north of Abergorlech.                                                                 | • Survey suitable stands of mature birch in 'ffridd' habitat areas of Carmarthenshire.  
                                 • Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the [Critical Level for ammonia](#) from intensive agricultural practices. |
| Photo: © Ray Woods           |                                                                                                         |                                                                                         |
| Rinodina isidiodes           | • Mature trees, over woods, ancient woodland.  
                                 • Cynghordy, Llangathen 1982, Dan y Parc 1995.                                                                 | • Survey suitable sites.                                                                 |
| Photo: © Alan Orange         |                                                                                                         |                                                                                         |
| Schismatommia graphidioides  | • It is a species of semi-open wooded situations, most commonly found at woodland-parkland interfaces, in sheltered glades, wood-pasture and at woodland edges.  
                                 • Dinefwr - last recorded 1976.                                                                 | • Identify parkland sites for survey.  
                                 • Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the [Critical Level for ammonia](#) from intensive agricultural practices. |
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| **Toninia sedifolia**           | • It is not infrequent on calcareous sandy soil in, for example, the cracks between limestone rocks and on rock ledges in coastal areas. It also occurs amongst bryophytes on shell-rich sand dunes once accretion stops and before larger plants can invade. Many sites are rabbit grazed. Rarely on inland limestone.  
  • Wharley Point and Carreg Cennen – 1986 and 2010.                                                                 | • More records to establish distribution.  
  • Over 20 sites in county now.  
  • Use this species to engage with public as easy to identify – send leaflet to schools/farmers unions, etc.                                                                                          |
| **Usnea articulata**            | • Its straggly, hair-like, tangled, usually unattached stems that can be up to a metre long, swell at intervals along the main branches to create small green/grey sausage-like strings c. 3mm in diam.  
  • There are three main habitats: hawthorns in windy places; the leeward side of windy larch plantations; and willow tops in wetlands. Other records come from oak and rowans. The windiness is a common factor.                                                                 | • Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the Critical Level for ammonia from intensive agricultural practices.  
  • More records required to establish distribution.  
  • Over 20 sites in county now.  
  • Use this species to engage with public as easy to identify – send leaflet to schools/farmers unions, etc.                                                                                          |
| **Usnea florida**               | • It forms rounded, upright, yellow-green shrub-like colonies on the twigs and smaller branches of trees and shrubs and occasionally on the timber of fences and gates.  
  • Over 50 records in the county.  
  • This is a Nitrogen-sensitive species and is declining rapidly in SW England and parts of Wales.                                                                                                           | • Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the Critical Level for ammonia from intensive agricultural practices.  
  • More records required to establish distribution.  
  • Over 20 sites in county now.  
  • Use this species to engage with public as easy to identify – send leaflet to schools/farmers unions, etc.                                                                                          |
| **Lobarion assemblages**        | • Records for *Lobaria pulmonaria* from three sites: Dinefwr, the Talley oak avenue and Whitland Abbey.  
  • *Agonimia octospora* was recorded on 15 trees in Dinefwr Park.  
  • Well-developed Lobarion colonies composed of *Sticta* species, *Nephroma*, etc. in Cwm Marlais (Brechfa Forest) and at Pont-felin-gat (NBGW) should be assessed for SSSI notification (Cwm Marlais qualifies).                                                                 | • Sensitivity to ammonia means that this species is vulnerable to impacts from an exceedance of the Critical Level for ammonia from intensive agricultural practices.  
  • More records required to establish distribution.  
  • Over 20 sites in county now.  
  • Use this species to engage with public as easy to identify – send leaflet to schools/farmers unions, etc.                                                                                          |
| **Lobaria pulmonaria**          |                                                                                                                                                                                                                                    |                                                                                                          |
| **Metallophyte assemblages**    |                                                                                                                                                                                                                                    |                                                                                                          |
|                                | http://wales-lichens.org.uk/s42-communities/metallophyte-community                                                                                                      |                                                                                                          |

*Partneriadeth Natur SIR GÂR • CARMARTHENSHIRE Nature Partnership*