

Plantlife

A Lichen Red Data List for Wales

With the help of the British Lichen Society, the Countryside Council for Wales and the National Museum of Wales.

Rhestr o Gen Data Coch ar gyfer Cymru

Gyda chymorth y
British Lichen
Society, Cyngor Cefn
Gwlad Cymru ac
Amgueddfa Cymru.





British Lichen Society



Cyngor Cefn Gwlad Cymru
Countryside Council for Wales



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Summary

Despite its small size (11% of mainland Britain) Wales has supported 1290 lichen taxa (including 1250 species) representing 68% of the total British lichen flora. Using widely accepted international criteria and data collated by the British Lichen Society a Welsh regional threat status is offered for all Welsh lichens and allied fungi for the first time. The threat status of Welsh species is compared with the already published British Red Data List for Lichens.

Of the 1290 species of lichens and fungi traditionally studied by lichenologists in Wales 22 are probably extinct (2% of the total) and 204 more (16%) are threatened with extinction. Of this latter total 28 (2% of the overall total) are Critically Endangered, 24 (2%) are Endangered and 156 (12%) are Vulnerable. A further 131 taxa (10%) are Near Threatened, whilst 152 taxa (12%) lack sufficient information for a threat category to be assigned to them.

Of Welsh lichens and fungi studied by lichenologists 38% of the taxa therefore require some action either to better understand their true status or reverse known ongoing declines. This compares with 35% for Britain as a whole.

Believed to be the first such regional report of threats facing lichen species in Britain, it is hoped these results will be used to help prioritise future conservation actions.

Crynodeb

Er mai gwlad fechan yw Cymru (yn cyfrif am 11% o holl arwynebedd tir mawr Prydain) mae wedi cynnal 1290 tacson cen (yn cynnwys 1250 rhywogaeth). Mae hyn yn gyfystyr â 68% o holl fflora cen Prydain. Defnyddiwyd data a gasglwyd gan y 'British Lichen Society', ynghyd â meini prawf rhyngwladol cydnabyddedig, er mwyn gallu cynnig disgrifiad am y tro cyntaf o statws holl gennau Cymru â'r ffyngau sy'n gysylltiedig â nhw o safbwynt y bygythiad y maent yn ei wynebu ar lefel ranbarthol. Mae statws bygythiad y rhywogaethau Cymreig yn cael ei gymharu â'r Rhestr Data Coch ar gyfer Prydain, sydd eisoes wedi ei chyhoeddi. Mae'r statws bygythiad hwnnw yn cael ei gymharu gyda'r Rhestr Data Coch Brydeinig, sydd eisoes wedi ei chyhoeddi.

O blith y rhywogaethau cen a ffwng sydd wedi cael eu hastudio'n draddodiadol gan arbenigwyr cen yng Nghymru mae'n debyg bod 22 (2% o'r cyfanswm) wedi mynd i ddifancoll a bod 204 (16%) o'r gweddill mewn perygl o fynd i ddifancoll. O blith y cyfanswm olaf hwn mae 28 (2%) Dan Fygythiad Enbyd, 24 (2%) Dan Fygythiad a 156 (12%) yn Fregus. Mae 133 tacson pellach (10%) yn Agos at fod Dan Fygythiad tra bod diffyg gwybodaeth am 152 (12%) tacson yn ei gwneud yn amhosib i bennu statws bygythiad ar eu cyfer.

Felly mae angen cymryd camau gweithredu ar gyfer 38% o'r tacson cen a ffwng Cymreig sydd wedi cael eu hastudio gan arbenigwyr, un ai er mwyn deall mwy am eu gwir statws neu i wrthdroi dirywiad sy'n digwydd ar hyn o bryd. Mae hyn yn cymharu â 35% ar gyfer Prydain gyfan.

Credir mai hwn yw'r adroddiad rhanbarthol cyntaf ynaglŷn â'r bygythiadau sy'n wynebu rhywogaethau cen ym Mhrydain. Gobeithir y bydd y canlyniadau hyn yn cael eu defnyddio er mwyn blaenoriaethu gwaith cadwraeth yn y dyfodol.

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This report presents the results of a comprehensive analysis of the current status of lichens in Wales using the updated IUCN criteria.

It has brought to light a suite of species more threatened in Wales than in the rest of Britain, as well as some species threatened in Britain but which are doing better in Wales. Wales has a responsibility to protect and conserve all these threatened species, and it is hoped the findings of this study will be used to inform priorities for conservation action and future revisions of the British Red Data Book of Lichens and the list of lichens that appear in Section 42 of the Natural Environment and Rural Communities Act (NERC) 2006 (*Habitats and species of principal importance in Wales*). It also highlights those species with Welsh populations of European and/or world significance.

This report has been produced by Plantlife Cymru with the support of the Countryside Council for Wales and the British Lichen Society.



Contents

1	Introduction	6
2	Implementation of this Red Data List	7
3	Coverage	8
	3.1 Taxonomic coverage	8
	3.2 Geographic coverage	8
4	Data sources	9
5	Application of IUCN criteria	10
	5.1 IUCN categories at the regional level	10
	5.2 Treating Wales as a region	10
	5.3 IUCN categories in Wales	11
6	Explanation of the Wales Red Data List	14
	6.1 Species listed	14
	6.2 Wales Red List threat status and criteria	14
	6.3 British Red List threat status	14
	6.4 Rarity	14
	6.5 National/international responsibility	15
	6.6 Edge of British range in Wales	15
	6.7 Porportion of British population	15
	6.8 Biodiversity Action Plan and Section 42 species	15
	6.9 Schedule 8 species	15
7	Analysis	16
	7.1 Comparison of Welsh and British Red Data Lists	16
	7.2 Taxa extinct in Wales	16
	7.3 Taxa “doing better” in Wales	18
	7.4 Taxa “doing worse” in Wales	19
	7.5 Taxa reaching the edge of their range in Wales	24
	7.6 Species for which Wales has a particular responsibility	28
8	Lichen Red Data List for Wales	35
9	Acknowledgements	62
10	References	63
	Appendix 1	64

1. Introduction

Plantlife published *A Vascular Plant Red Data List for Wales* (Dines, 2008) in 2008 following widespread consultation. Its publication was widely welcomed and it seemed desirable to try at least some of the methodology out on another group of organisms. *The Red Data Books of Britain and Ireland: lichens Volume 1: Britain* (Church *et al*) had been published in 1996. This list had been extended and revised by the publication of *A Conservation Evaluation of British Lichens* (Woods and Coppins) in 2003, a revision of which is currently in press.

Such has been the increase in our knowledge of this group, coupled with the discovery of a number of new taxa, that a major revision of *The Lichen Flora of Great Britain and Ireland* (Purvis *et al* 1992) was recently published by the British Lichen Society (Smith *et al* (2009)). A "Threatened lichens of Wales" distribution database (Countryside Council for Wales and British Lichen Society, pers.comm.) has also been developed and over 60,000 Welsh lichen records accumulated by the local record centres in Wales. The British Lichen Society has also continued to develop its own national databases and to publish records in its *Bulletin* of new and interesting lichens. Finally, but by no means least, a small but dedicated band of amateur and professional lichenologists are all willing to share their data and expertise, as are members of Countryside Council for Wales (CCW) staff. Without their input this list could not have been produced

As with the *Vascular Plant Red Data List for Great Britain* (Cheffings & Farrell, 2005) and the *Vascular Plant Red Data List for Wales* (Dines, 2008), it is hoped regular updates to this Welsh Red Data List for Lichens will be made available electronically, based on either new data, additional data that is made available, or refined methods of analysing data. The updates may result in changes to threat status categories for certain taxa and these changes will supersede the status categories published here.

This report has been produced by Plantlife Cymru, but would not have been possible without considerable help from all those who have shared their records, the British Lichen Society, the National Museum of Wales and the Countryside Council for Wales. I am particularly indebted to Alan Orange, Steve Chambers and Brian Coppins for their invaluable assistance.

2. Implementation of this Red Data List

One aim of this report is to assess the level of threat facing lichen species in Wales so that priorities can be identified for conservation action. However, Wales is a political, not biogeographic area, and this list should not be used in isolation without reference to the *Red Data Books of Britain and Ireland: lichens Volume 1: Britain* (Church *et al* 1996) and *A Conservation Evaluation of British Lichens* (Woods and Coppins, 2003) and any revisions. Now that Red Data Lists exist for lichens in both Great Britain and Wales, some guidance on how these lists should be used is needed, especially in view of the fact that a few taxa have different levels of threat in each area.

Any taxon that is threatened (Critically Endangered, Endangered, Vulnerable or Near Threatened) in Britain (Woods and Coppins, *op. cit.*) should also be regarded as a priority for conservation in Wales, regardless of its threat status in Wales. The categories of threat given in Woods and Coppins (*op. cit.*) are based on an assessment of national distribution and decline, and apply throughout the current range of each taxon in England, Scotland, Wales and the Isle of Man.

If a taxon is less threatened in Wales than it is in Britain (it has a lower category of threat than in Britain or is even classified as Least Concern in Wales), the Welsh population must still be regarded as a critically important component of the British population and deserves full protection in Wales with appropriate conservation measures. This is because it represents a part of the whole British population that has more chance of surviving and recovering than the British population as a whole. Should the British population outside Wales continue to decline, the Welsh population will become increasingly important, again regardless of its status within Wales. Should the Welsh population begin to decline, the species will be regarded as even more threatened in Britain as a whole.

Taxa that are more threatened in Wales than they are in Britain should naturally be considered as priorities for conservation within Wales.

3. Coverage

3.1 Taxonomic coverage

This Red Data List includes all lichens and fungi traditionally studied by lichenologists (the latter indicated by [F] after the Latin name). Insufficient is known about the distribution and status of most subspecific taxa and they have mostly been omitted from consideration in this report. Most lichenicolous fungi have also been excluded pending further study, though clearly when a fungus is known to be confined to a particular lichen species that is itself threatened, this report must provide useful information on its status.

The taxonomy mostly follows *The Lichens of Britain and Ireland*, Smith *et al* (2009).

3.2 Geographic coverage

This Red Data List covers the country of Wales, including the 13 vice-counties of Monmouthshire, Glamorgan, Brecknockshire, Radnorshire, Carmarthenshire, Pembrokeshire, Cardiganshire, Montgomeryshire, Merionethshire, Caernarvonshire, Denbighshire, Flintshire and Anglesey.

4. Data sources

As with the British Red Data Lists, this analysis used data from the British Lichen Society's distributional databases and the draft threatened lichens database. These data were used as a basis for the analysis of decline used in IUCN threat criterion A, which for the purpose of this study looks exclusively at levels of decline in distribution or area of occupancy (AOO).

Other IUCN criteria (B, C and D) examine the current number of sites, populations or individuals in the area being considered. Criteria B and C also require evidence of any ongoing decline. For these criteria, detailed up-to-date site data were sought from BLS Vice-County recorders, site managers and consultants who have prepared reports on sites. In such cases, the most recent record was sought for each site, along with population information and a judgement of whether any population decline is underway based on recent records (mostly 1987-2007). IUCN threat categories for criteria B, C and D in this study are therefore based on the most up-to-date and detailed information available.

The judgement of site population decline is perhaps the most difficult to make given the paucity of monitoring data for many taxa and there is much room for improved monitoring of many taxa. Some taxa will be allocated a lower category of threat (based on population size alone) because monitoring data is not available. For some lichen species there is a problem in identifying a mature individual as required if use is to be made of parts of criteria B, C and D. Irregular extensive patches of a species may be the result of the coalescence of a number of individuals. Conversely a large rapidly growing individual may die out in the centre leaving several separated segments of the thallus to continue to grow. This change could be viewed as the expansion of a population that in reality may be undergoing a decline. Couple this dilemma with the threat faced by all those individuals that occur on a single tree or rock where a single event, such as the spread of ivy or the collapse of the tree or exfoliation of part of a rock face, may eliminate the entire population, it seemed sensible to reinterpret criterion D and equate an individual with a single tree or rock outcrop.

5. Application of IUCN criteria

5.1 IUCN categories at the regional level

The standard IUCN Red Data List Categories (IUCN 2001) are used with the following modifications to take account of the regional nature of this analysis:

Taxa extinct within Wales but extant in other parts of the world are classified as **Regionally Extinct** (RE). A taxon is RE when there is no reasonable doubt that the last individual in the region has died or a species has not been seen since 1960. In this report, taxa extinct in Britain as a whole are classified as EX, while those extinct in Wales but still present elsewhere in Great Britain are classified as RE. The list of extinctions for Wales therefore includes both EX and RE taxa.

5.2 Treating Wales as a region

Considerable guidance is given by IUCN (2003) regarding the application of standard IUCN criteria and categories (IUCN, 2001) to a region (defined as any sub global geographically defined area, such as a continent, country, state, or province). Provided that the regional population being assessed is isolated from conspecific populations outside the region, the IUCN Red Data List Criteria (IUCN, 2001) can be used without modification within any geographically defined area.

However, when the criteria are applied to part of a population defined by a geopolitical border, as in the case of Wales sharing a border with England, the threshold values listed under each criterion may be inappropriate because the unit being assessed is not the same as the whole population or subpopulation. As a result, the estimate of extinction risk may be inaccurate.

In order to take this into account, we need to ask whether the Welsh population experiences any significant immigration of viable propagules from England (Figure 1). If not (or it is unknown), there is no change in the Welsh IUCN category. If, however, it is known or appears likely that viable propagules are entering Wales from England, the Welsh IUCN category is downgraded by one level provided that the GB population is stable or increasing. If the British population is decreasing, though, the Welsh IUCN category remains the same (further modification of the category can take place if the Welsh population is acting as a sink, but it has not been possible to determine this). The level of propagule immigration is almost impossible to assess. However, an attempt has been made to determine how likely immigration is by a consideration of the proximity of threatened Welsh taxa to English populations.

The threat category of Welsh taxa where the entire population is close to English populations may therefore be downgraded by one category if the British population is Least Concern. If, however, the British population is threatened, the Welsh IUCN category remains unaltered. In practice until recently so much of the English border in both north and south Wales was so affected by atmospheric pollution there were few lichens

available to colonize Wales. Those few species that might fall into this category also tend to occur on man-made substrates in Wales such as memorials in churchyards or even to fall into a category well-understood within higher plants but as yet not developed to encompass lichens – that of a species of casual occurrence. The thinking still needs to be developed to prioritize our actions with respect to these species, for which Wales may never have been part of their natural range.

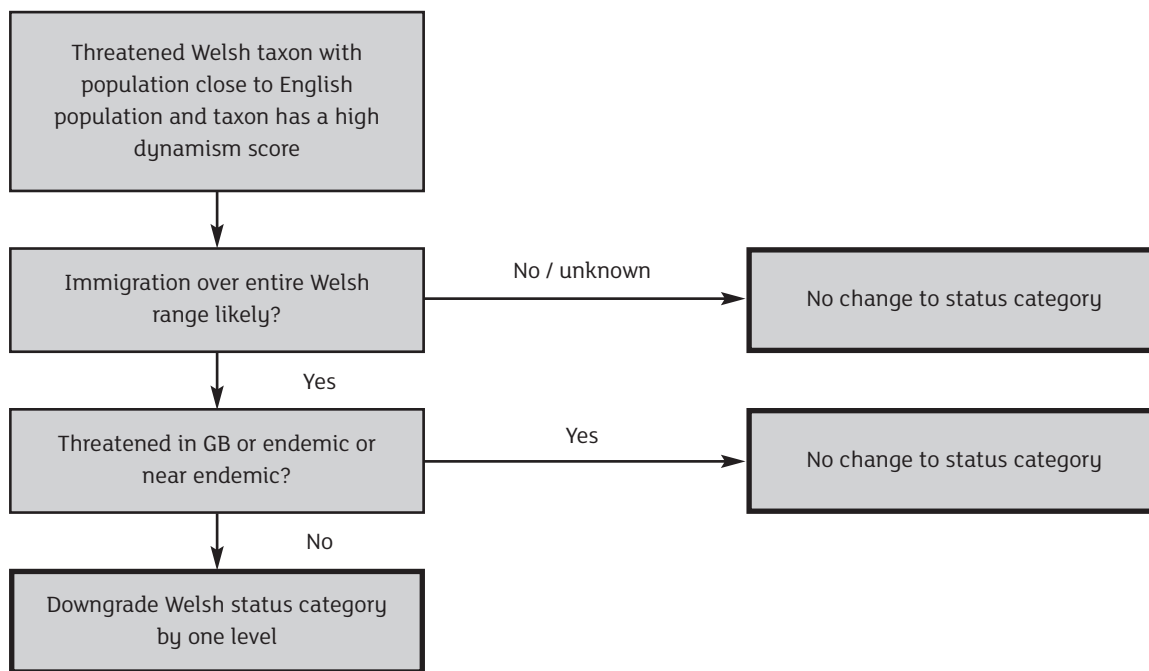


Figure 1. Chart used to determine whether any changes to the Welsh threat category were necessary due to potential immigration from England (adapted from IUCN, 2003)

5.3 IUCN categories in Wales

Apart from the modifications given in sections 5.1 and 5.2 above, the standard IUCN categories and criteria (IUCN, 2001) have been used to produce this Red Data List. This means that the same thresholds used to determine categories in the British Red Data List have been used for Wales, and the lists are therefore directly comparable. Because of this, a detailed treatment of how each criterion was applied is not reproduced here, but readers are referred to Woods and Coppins (2003) and its subsequent editions for further information. The following, however, gives a brief summary of the categories and criteria used here.

EXTINCT (EX)

A taxon is presumed extinct when surveys in known and/or expected habitat throughout its historic range have failed to record an individual. For this evaluation, a period of 50 years is generally used, providing there have been reasonable attempts to re-discover the species concerned.

CRITICALLY ENDANGERED (CR), ENDANGERED (EN) OR VULNERABLE (VU)

Taxa are considered to be Critically Endangered, Endangered or Vulnerable when any one of the following criteria are met.

	CR	EN	VU
A Decline in population size based on any of 1–4.			
1) % decline over last 50–100 years where causes of decline are understood, have ceased and are clearly reversible.	>90%	>70%	>50%
2) % decline over last 50–100 years where causes of decline have not ceased or are not understood or are not reversible.	>80%	>50%	>30%
3) % decline projected to occur in future.	>80%	>50%	>30%
4) % decline over last 50–100 years added to projected future decline where the cause of decline has not ceased.	>80%	>50%	>30%
B Geographic range either as B1 (extent) or B2 (area occupied)			
1) Range less than given amount and estimates indicate at least two of the following :-	100 km ²	5000 km ²	20,000 km ²
a) Severely fragmented range or known from no more than the given number of locations.	1	5	10
b) Decline in extent, area &/or quality of habitat, number of populations and/or individuals.	-	-	-
c) Extreme fluctuations in extent, area of occupancy or number of locations or mature individuals.	-	-	-
2) Area of occupancy estimated to be less than given area, and estimates indicating at least two of a–c.	10 km ²	500 km ²	2000 km ²
a) Severely fragmented or known to exist at no more than a given number of locations.	1	5	10
b) Continuing decline, observed, inferred or projected, in any of the following:	-	-	-
i) extent of occurrence			
ii) area of occurrence			
iii) area, extent &/or quality of habitat			
iv) number of locations or subpopulations			
v) number of individuals			
c) Extreme fluctuations in any of the following:	-	-	-
i) extent of occurrence			
ii) area of occurrence			
iii) number of locations or subpopulations			
iv) number of individuals			

	CR	EN	VU
C Population size estimated to number fewer than the given number of individuals (an individual generally taken to be tree number for epiphytic species or discrete units of rock for epilithic taxa) and either:-	250	2500	10,000
1) An estimated continuing decline of the given percentage in up to the last 100 years <u>or</u>	25%	20%	10%
2) An estimated decline observed or inferred in number of individuals (see above for definition of individual) and at least one of the following:-			
a) Population structure in form of one of the following:-			
i) no sub population estimated to contain more than the given number of mature individuals or	50	250	1000
ii) at least the given % of mature individuals in one subpopulation.	90%	95%	100%
b) Extreme fluctuations in number of mature individuals (see above for definition of individual).	-	-	-
D Population size estimated to number fewer than the given number of mature individuals (see above for definition) (D or D1). Or in the case of species considered for Vulnerable status, its population occupying a very restricted area (typically 5 or fewer locations) so rendering it vulnerable to extinction (D2).	50	250	1000
E Probability of extinction is at least the given % within the next 100 years.	50%	20%	10%

Table 1. Criteria used in Wales for evaluating species and deciding on their IUCN Red List category

NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. Whilst Data Deficient could be considered not to be a category of threat, in practice it must be a matter of grave concern that a threat status cannot be assigned. Some of these species could be critically endangered. Consequently a high priority should be attached to securing resources to further investigate these species.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria. There can be many reasons for this. Often it is due to some taxonomic issue.

6. Explanation of the Wales Red Data List

The columns that appear in the Lichen Red Data List are described below.

6.1 Species listed

All lichen species reported from Wales are listed in the two **Taxon** columns. The definition of lichen is not always clear-cut and some non-lichenized fungi are included where they form part of a genus with mostly lichenized species and have been traditionally studied by lichenologists. An [F] after the name identifies such fungi. Due to a paucity of information lichenicolous fungi have mostly been excluded though species that commence life as lichenicolous species to later establish themselves as independent lichens are included.

6.2 Wales Red List threat status and criteria

The IUCN threat category for Wales is given in the **Wales Red List Threat Status** column. The criterion under which each threatened taxon qualifies is given in the **Criteria** column. For more details on how the categories CR (Critically Endangered), EN (Endangered), VU (Vulnerable), NT (Near Threatened) and LC (Least Concern) were applied and the criteria used, see Woods and Coppins (2003, pp 29-31) and section 5.3 above.

6.3 British Red List threat status

The threat category of the species in Britain is given in the British Red List Threat Status column and mostly follows Woods and Coppins (2003). There are a few updated species. The reasons for such changes will be published shortly by JNCC in a revision of this document.

6.4 Rarity

By reference to the British Lichen Society's hectad data base all those species recorded from England, Scotland, Wales and the Isle of Man in fewer than 15 hectads of the OS National Grid are noted as nationally rare (NR) whilst those recorded from 16 to 100 hectads are noted as being nationally scarce (NS). This follows the convention adopted for higher plants and ferns. Interpreting this data requires care. Recording is incomplete for part of the country and species may be included that are common in a particular habitat, though the habitat itself may be nationally rare or scarce.

6.5 National/international responsibility

An “IR” placed in this column indicates that populations of this species in Britain are considered by Woods & Coppins (2003) to be of international importance, generally on account of their abundance in Britain compared to the rest of the world. An “E” indicates this species is endemic to Britain and Ireland, occurring nowhere else in the world.

6.6 Edge of British range in Wales

Taxa that reach the edge of their British range in Wales are identified in this column. The edge of range in question is indicated by “N”, “S”, and “W”, where “S” indicates that the taxon reaches its southern limit in Wales, and so on.

6.7 Proportion of British population

This column records the percentage of hectads in Wales compared to the total hectads for Britain that the species occupies using data from the British Lichen Society’s Atlas Database. Only those species for which Wales has 20% or more of the total British hectad records are included. Although crude, this provides an indication of how much of the British resource is located within Wales.

6.8 Biodiversity Action Plan and Section 42 species

Within this column are listed with a “P” all those species that possess a National Biodiversity Action Plan. An asterisk indicates a species that is listed on Section 42 of the Natural Environment and Rural Communities Act (2006) as being a species of principal importance in Wales.

6.9 Schedule 8 species

All species listed on Schedule 8 of the Wildlife and Countryside Act (1981) that occur in Wales are identified in this column by the abbreviation “S8”.

7. Analysis

7.1 Comparison of Welsh and British Red Data Lists

Wales, despite being only 11% of the land area of Britain (ie England, Scotland and Wales), has at one time supported 71% of the total British lichen flora. Table 2 compares the number of species in each threat category between Britain and Wales. Whilst there is some comfort in the similar percentages of critically endangered and endangered lichens in Wales compared to Britain, the significantly larger percentage of vulnerable species is a cause of grave concern. This extra degree of vulnerability may to some extent be due to small population sizes partly created by the relatively small size of Wales. There is, however no doubt that anthropogenic factors have played a large part in reducing population sizes. Atmospheric pollution by the 1970s had wiped out most of the native lichen floras from all of south and northeast Wales and grossly affected large parts of central Wales. This, coupled with wholesale woodland fellings, particularly from the late 1700s through to the Second World War, decimated ancient woodland lichen communities.

	Britain		Wales	
	No. of taxa	% of total	No. of taxa	% of total
Extinct (EX) GB, (EX+RE)Wales	31	2	22	2
Critically Endangered (CR)	42	2	28	2
Endangered (EN)	34	2	24	2
Vulnerable (VU)	105	6	156	12
Near Threatened (NT)	205	11	131	10
Data Deficient (DD)	249	14	152	12
Least Concern (LC)	1168	64	803	61
Total evaluated	1834		1316	

Table 2. Number and proportion of taxa in each Red Data List category in Britain and Wales.

7.2 Taxa extinct in Wales

Out of the total of 1316 taxa evaluated from Wales 22 taxa (2%) are thought to have become extinct. This is similar to the percentage extinction for mainland Britain.

Table 3 below gives the list of extinctions for Wales with the Vice-county and last year each taxon was recorded.

Whether all of these species are really extinct in Wales must be the subject of some debate. A species such as *Thelocarpon intermediellum* is a short lived casual and may occur overlooked in other sites. The one boulder on which it was reported was removed from the road verge. Species such as *Tomasellia diffusa* may still occur on the smooth bark of alder twigs. This is considered to be a normally rather unproductive habitat by most lichenologists and one rarely searched with diligence. In contrast mature elm trees, the habitat of *Collema fragrans* and *Bacidia subincompta* in Wales, have largely been felled following their death due to Dutch elm disease, so their loss is probably genuine.

It is also most likely that species have been lost due to atmospheric pollution throughout the years of the industrial revolution. By the 1960s large areas of south and north east Wales were

almost entirely devoid of lichens. Unfortunately so little recording took place in these areas before the industrial revolution that any losses went unrecorded. The most recent loss is due to a demise of ancient weather boarded barns. The last known site for *Chaenotheca phaeocephala* was on a barn now on the point of collapse. Elsewhere timber preservative treatment prevents colonisation. This is most notably seen in the widespread use of tanalised softwood as a replacement for untreated hardwood. The Tir Gofal farm conservation scheme failed to take the requirements of these species into account and has funded the recladding of a number of old barns in entirely unsuitable materials. Ancient hardwood weatherboards were probably a very satisfactory substitute for the ancient limbs of slowly decaying trees that may well have been the original natural habitat of this lichen and one now almost lost from Britain.

GB Red List	Taxon	Wales Red List	Year last recorded	Vice-county last recorded	Main habitat in Wales
NE	<i>Arthonia punctilliformis</i> [F]	EX	?	Caerns	Holly bark
EX	<i>Arthothelium spectabile</i>	EX	1960	Merioneth	Smooth tree bark
EX	<i>Bacidea polychroa</i>	EX	1881	Anglesey	Mature tree bark
EX	<i>Calicium quercinum</i>	EX	c.1840	Merioneth	Oak trunks
EX	<i>Chaenotheca phaeocephala</i>	EX	2005	Radnor	Oak weather boards
EX	<i>Placythium anemoideum</i>	EX	1957	Glamorgan	Limestone shingle
EX	<i>Staurothele rufa</i>	EX	1964	Glamorgan	Old limestone quarry
NT	<i>Acarospora macrocarpa</i>	RE	1886	Merioneth	Not known
VU	<i>Bacidia subincompta</i>	RE	1983	Brecknock	Elm bark
CR	<i>Bryoria smithii</i>	RE	1960	Merioneth	Upland acid rock
CR	<i>Catapyrenium psoromoides</i>	RE	1924	Merioneth	Basic rock outcrop & wall
LC	<i>Cetraria ericetorum</i>	RE	1881	Caerns	Upland heath?
EN	<i>Collema fragrans</i>	RE	1986	Radnor	Elm bark
DD	<i>Dictyonema interruptum</i>	RE	1995	Brecknock	Upland rock outcrop
DD	<i>Lecidea commaculans</i>	RE	1871	Caerns	Rhyolite outcrop
LC	<i>Miriquidica complanata</i>	RE	?	Caerns	Moist montane rocks
VU	<i>Pertusaria pustulata</i>	RE	c.1870	Merioneth	Young ash tree
LC	<i>Placynthium tantaleum</i>	RE	1875	Merioneth	Mortar of bridge wall
VU	<i>Poeltinula cerebrina</i>	RE	pre1960	Merioneth	Limestone outcrops
VU	<i>Pyrenula coryi</i> [F]	RE	1877	Merioneth	Hazel bark
LC	<i>Thelocarpon intermediellum</i>	RE	1983	Radnor	Boulder top
LC	<i>Tomasellia diffusua</i> [F]	RE	1871	Caerns	Alder branch bark

Table 3. The 22 taxa that have become extinct in Wales, along with the Vice-county and last year each taxon was recorded and their Red Data List status in Britain and Wales. Extinct (EX) taxa have been lost from the British and Welsh flora, Regionally Extinct (RE) taxa have been lost from Wales but occur elsewhere in Britain. [F] indicates this species is a fungus traditionally studied by lichenologists.

It should also be noted that other species could be added to the list. *Melanelia stygia* has not been refound in its only Welsh locality despite two recent searches. It is still just possible that the one rather inconspicuous rock on which it occurred was somehow missed. *Pannaria rubiginosa* and *Gomphillus calycioides* do not appear to have been seen anywhere in Wales in the last three decades.

7.3 Taxa “doing better” in Wales

Because identical IUCN threat criteria have been used to identify threatened taxa in both Britain and Wales, we can compare the two floras directly to see how various taxa are faring. Some are “doing better” in Wales (in other words, they are less threatened in Wales than they are in Britain), while others are “doing worse” (they are more threatened in Wales than Britain).

As you would expect when comparing a smaller area with a larger one, there are only a few taxa that are doing better in Wales (Table 4).

Taxon	GB Red List	Wales Red List
<i>Cladonia peziziformis</i>	CR	NT
<i>Protoparmeliopsis achariana</i>	CR	EN
<i>Porina effiliata</i>	CR	EN
<i>Cryptolechia carneolutea</i>	EN	VU
<i>Heterodermia leucomela</i>	EN	VU
<i>Stereocaulon symphycheilum</i>	EN	VU
<i>Collema fragile</i>	VU	NT
<i>Protoparmelia atriseda</i>	VU	NT
<i>Gyalecta flotowii</i>	NT	LC
<i>Leptogium palmatum</i>	NT	LC
<i>Usnea florida</i>	NT	LC

Table 4. The ten taxa that are “doing better” in Wales compared to Britain, arranged by decreasing British threat category. Taxa are included if they are threatened (CR, EN, VU) or near threatened (NT) in Britain, but have a lower threat category or are least concern (LC) in Wales.

The most noteworthy difference in threat status is that of *Cladonia peziziformis*. This lichen is a colonist of recently burnt coastal heathland where it is rapidly replaced by other species. It has not been seen in England since 1968 yet has been found 5 times in recent years in Wales in considerable quantities in most sites. The remaining species differ in only a single category, the difference in the main reflecting a steady increase in recent years in the number of their sites or the size of their populations.

7.4 Taxa “doing worse” in Wales

The 235 taxa that are more threatened in Wales than they are in Britain are listed in Table 5. Because Wales is a smaller area than Britain, many taxa are naturally more threatened than they are in Britain under criteria B, C and D (limited number of individuals or populations). Couple this with the damaging effects of twentieth century sulphur dioxide pollution and now the continued impact of acid rain and rising ammonia levels, so widespread in Wales, that whole suites of sensitive species have been pushed to the brink of extinction in Wales yet remain so frequent in the Western Highlands of Scotland as to cause their British conservation assessment to be that of “Least Concern”. Species of *Lobaria*, *Pannaria*, *Pseudocyphellaria*, *Sticta* and *Parmeliella* are, for example, all doing worse in Wales.

Taxon		GB Red List	Wales Red List
<i>Biatoridium</i>	<i>monasteriense</i>	EN	CR
<i>Caloplaca</i>	<i>flavorubescens</i>	EN	CR
<i>Caloplaca</i>	<i>luteoalba</i>	EN	CR
<i>Endocarpon</i>	<i>adscendens</i>	EN	CR
<i>Strigula</i>	<i>stigmatella</i> var. <i>stigmatella</i>	EN	CR
<i>Bacidia</i>	<i>incompta</i>	VU	CR
<i>Biatoridium</i>	<i>delitescens</i>	VU	CR
<i>Caloplaca</i>	<i>luteoalba</i>	VU	CR
<i>Peltigera</i>	<i>venosa</i>	VU	CR
<i>Physcia</i>	<i>tribacioides</i>	VU	CR
<i>Pseudocyphellaria</i>	<i>lacerata</i>	VU	CR
<i>Pyrenula</i>	<i>hibernica</i>	VU	CR
<i>Vestergrenopsis</i>	<i>elaeina</i>	VU	CR
<i>Buellia</i>	<i>hyperbolica</i>	VU	EN
<i>Collema</i>	<i>dichotomum</i>	VU	EN
<i>Graphina</i>	<i>pauciloculata</i>	VU	EN
<i>Lecanographa</i>	<i>amylacea</i>	VU	EN
<i>Sticta</i>	<i>canariensis</i> independ. green morph.	VU	EN
<i>Xanthoparmelia</i>	<i>tinctina</i>	VU	EN
<i>Collema</i>	<i>parvum</i>	VU	VU
<i>Biatora</i>	<i>globulosa</i>	NT	CR
<i>Blarneya</i>	<i>hibernica</i>	NT	CR
<i>Collema</i>	<i>fasciculare</i>	NT	CR
<i>Melanelia</i>	<i>stygia</i>	NT	CR
<i>Parmeliella</i>	<i>testacea</i>	NT	CR
<i>Pseudocyphellaria</i>	<i>intricata</i>	NT	CR
<i>Strangospora</i>	<i>microhaema</i>	NT	CR
<i>Strigula</i>	<i>thelopsidoides</i>	NT	CR
<i>Byssoloma</i>	<i>subdiscordans</i>	NT	EN
<i>Chaenotheca</i>	<i>chlorella</i>	NT	EN
<i>Endocarpon</i>	<i>pusillum</i>	NT	EN
<i>Fuscopannaria</i>	<i>sampaiana</i>	NT	EN
<i>Gomphillus</i>	<i>calycioides</i>	NT	EN
<i>Gyalidea</i>	<i>fritzei</i>	NT	EN
<i>Leptogium</i>	<i>subtorulosum</i>	NT	EN
<i>Sporastatia</i>	<i>polyspora</i>	NT	EN

A Lichen Red Data List for Wales

Taxon		GB Red List	Wales Red List
<i>Sporastatia</i>	<i>testudinea</i>	NT	EN
<i>Gyalecta</i>	<i>foveolaris</i>	NT	EN
<i>Porina</i>	<i>interjungens</i>	NT	NT
<i>Acarospora</i>	<i>badiofusca</i>	NT	VU
<i>Agonimia</i>	<i>octospora</i>	NT	VU
<i>Arthonia</i>	<i>zwackhii</i>	NT	VU
<i>Catillaria</i>	<i>aphana</i>	NT	VU
<i>Chaenothecopsis</i>	<i>savonica</i>	NT	VU
<i>Collema</i>	<i>nigrescens</i>	NT	VU
<i>Cladonia</i>	<i>uncialis uncialis</i>	NT	VU
<i>Collema</i>	<i>occultatum</i>	NT	VU
<i>Dirina</i>	<i>massiliensis</i> f. <i>massiliensis</i>	NT	VU
<i>Heterodermia</i>	<i>japonica</i>	NT	VU
<i>Lecanora</i>	<i>horiza</i>	NT	VU
<i>Lecanora</i>	<i>quercicola</i>	NT	VU
<i>Lemmopsis</i>	<i>arnoldiana</i>	NT	VU
<i>Lempholemma</i>	<i>cladodes</i>	NT	VU
<i>Lempholemma</i>	<i>intricatum</i>	NT	VU
<i>Lempholemma</i>	<i>radiatum</i>	NT	VU
<i>Leptogium</i>	<i>brebissonii</i>	NT	VU
<i>Leptogium</i>	<i>massiliense</i>	NT	VU
<i>Megalospora</i>	<i>tuberculosa</i>	NT	VU
<i>Megaspora</i>	<i>verrucosa</i>	NT	VU
<i>Miriquidica</i>	<i>lulensis</i>	NT	VU
<i>Mycomicrothelia</i>	<i>atlantica</i>	NT	VU
<i>Opegrapha</i>	<i>prosodea</i>	NT	VU
<i>Phaeographis</i>	<i>lyellii</i>	NT	VU
<i>Parmelinopsis</i>	<i>minarum</i>	NT	VU
<i>Physcia</i>	<i>clementei</i>	NT	VU
<i>Placynthium</i>	<i>asperellum</i>	NT	VU
<i>Placynthium</i>	<i>pannariellum</i>	NT	VU
<i>Polyblastia</i>	<i>efflorescens</i>	NT	VU
<i>Polyblastia</i>	<i>terrestris</i>	NT	VU
<i>Porina</i>	<i>curnowii</i>	NT	VU
<i>Porina</i>	<i>hibernica</i>	NT	VU
<i>Protothelenella</i>	<i>sphinctrinoides</i>	NT	VU
<i>Pterygiopsis</i>	<i>coracodiza</i>	NT	VU
<i>Pterygiopsis</i>	<i>lacustris</i>	NT	VU
<i>Ramonia</i>	<i>dictyospora</i>	NT	VU
<i>Rinodina</i>	<i>milvina</i>	NT	VU
<i>Stereocaulon</i>	<i>delisei</i>	NT	VU
<i>Stereocaulon</i>	<i>glareosum</i>	NT	VU
<i>Stereocaulon</i>	<i>plicatile</i>	NT	VU
<i>Stereocaulon</i>	<i>tornense</i>	NT	VU
<i>Thelopsis</i>	<i>melathelia</i>	NT	VU
<i>Thermutis</i>	<i>velutina</i>	NT	VU
<i>Usnea</i>	<i>articulata</i>	NT	VU
<i>Wadeana</i>	<i>dendrographa</i>	NT	VU
<i>Syncesia</i>	<i>myrticola</i>	NT	VU
<i>Lobaria</i>	<i>scrobiculata</i>	LC	CR
<i>Pannaria</i>	<i>rubiginosa</i>	LC	CR
<i>Pseudocyphellaria</i>	<i>norvegica</i>	LC	CR
<i>Lecanographa</i>	<i>lyncea</i>	LC	EN
<i>Lobaria</i>	<i>virens</i>	LC	EN

Taxon		GB Red List	Wales Red List
<i>Absconditella</i>	<i>trivialis</i>	LC	NT
<i>Acrocordia</i>	<i>macrospora</i>	LC	NT
<i>Agonimia</i>	<i>allobata</i>	LC	NT
<i>Ainoa</i>	<i>mooreana</i>	LC	NT
<i>Amygdalaria</i>	<i>consentiens</i>	LC	NT
<i>Anisomeridium</i>	<i>robustum</i>	LC	NT
<i>Arthonia</i>	<i>anombrophila</i>	LC	NT
<i>Arthonia</i>	<i>vinosa</i>	LC	NT
<i>Arthopyrenia</i>	<i>cerasi</i>	LC	NT
<i>Bacidia</i>	<i>biatorina</i>	LC	NT
<i>Bactrospora</i>	<i>corticola</i>	LC	NT
<i>Belonia</i>	<i>incarnata</i>	LC	NT
<i>Biatora</i>	<i>chrysantha</i>	LC	NT
<i>Buellia</i>	<i>erubescens</i>	LC	NT
<i>Bunodophoron</i>	<i>melanocarpum</i>	LC	NT
<i>Catillaria</i>	<i>scotinodes</i>	LC	NT
<i>Cetraria</i>	<i>islandica</i> ssp. <i>islandica</i>	LC	NT
<i>Cetrelia</i>	<i>olivetorum</i> s. <i>lat.</i>	LC	NT
<i>Chrysothrix</i>	<i>chlorina</i>	LC	NT
<i>Cladonia</i>	<i>incrassata</i>	LC	NT
<i>Cladonia</i>	<i>rangiferina</i>	LC	NT
<i>Collema</i>	<i>furfuraceum</i>	LC	NT
<i>Collema</i>	<i>glebulentum</i>	LC	NT
<i>Cresponea</i>	<i>premnea</i>	LC	NT
<i>Dermatocarpon</i>	<i>leptophyllodes</i>	LC	NT
<i>Dermatocarpon</i>	<i>meiophyllizum</i>	LC	NT
<i>Dimerella</i>	<i>lutea</i>	LC	NT
<i>Diploschistes</i>	<i>gypsaceus</i>	LC	NT
<i>Fuscidea</i>	<i>intercincta</i>	LC	NT
<i>Hymenelia</i>	<i>epulotica</i>	LC	NT
<i>Hypocenomyce</i>	<i>friesii</i>	LC	NT
<i>Hypotrachyna</i>	<i>sinuosa</i>	LC	NT
<i>Hypotrachyna</i>	<i>taylorensis</i>	LC	NT
<i>Lecanactis</i>	<i>latebrarum</i>	LC	NT
<i>Lecanora</i>	<i>subaurea</i>	LC	NT
<i>Leptogium</i>	<i>britannicum</i>	LC	NT
<i>Leptogium</i>	<i>cyanescens</i>	LC	NT
<i>Megalaria</i>	<i>grossa</i>	LC	NT
<i>Melanelia</i>	<i>commixta</i>	LC	NT
<i>Melanelia</i>	<i>disjuncta</i>	LC	NT
<i>Moelleropsis</i>	<i>nebulosa</i>	LC	NT
<i>Mycobilimbia</i>	<i>epixanthoides</i>	LC	NT
<i>Mycobilimbia</i>	<i>pilularis</i>	LC	NT
<i>Nephroma</i>	<i>laevigatum</i>	LC	NT
<i>Nephroma</i>	<i>parile</i>	LC	NT
<i>Ochrolechia</i>	<i>frigida</i> f. <i>frigida</i>	LC	NT
<i>Pachyphiale</i>	<i>carneola</i>	LC	NT
<i>Pannaria</i>	<i>conoplea</i>	LC	NT
<i>Parmeliella</i>	<i>parvula</i>	LC	NT
<i>Parmeliella</i>	<i>triptophylla</i>	LC	NT
<i>Parmotrema</i>	<i>crinitum</i>	LC	NT
<i>Peltigera</i>	<i>britannica</i>	LC	NT
<i>Peltigera</i>	<i>collina</i>	LC	NT
<i>Pertusaria</i>	<i>coronata</i>	LC	NT

A Lichen Red Data List for Wales

Taxon		GB Red List	Wales Red List
<i>Phyllopsora</i>	<i>rosei</i>	LC	NT
<i>Physconia</i>	<i>perisidiosa</i>	LC	NT
<i>Polychidium</i>	<i>muscicola</i>	LC	NT
<i>Porina</i>	<i>coralloidea</i>	LC	NT
<i>Protothelenella</i>	<i>corrosa</i>	LC	NT
<i>Psora</i>	<i>decipiens</i>	LC	NT
<i>Psorotichia</i>	<i>schaereri</i>	LC	NT
<i>Punctelia</i>	<i>reddenda</i>	LC	NT
<i>Pycnothelia</i>	<i>papillaria</i>	LC	NT
<i>Rhaphidicyrtis</i>	<i>trichosporella</i>	LC	NT
<i>Rimularia</i>	<i>gyrizans</i>	LC	NT
<i>Schismatomma</i>	<i>quercicola</i>	LC	NT
<i>Solorina</i>	<i>spongiosa</i>	LC	NT
<i>Stereocaulon</i>	<i>condensatum</i>	LC	NT
<i>Stereocaulon</i>	<i>leucophaeopsis</i>	LC	NT
<i>Sticta</i>	<i>limbata</i>	LC	NT
<i>Sticta</i>	<i>sylvatica</i>	LC	NT
<i>Thelidium</i>	<i>pluvium</i>	LC	NT
<i>Thelopsis</i>	<i>rubella</i>	LC	NT
<i>Thelotrema</i>	<i>lepadinum</i>	LC	NT
<i>Tuckermanopsis</i>	<i>chlorophylla</i>	LC	NT
<i>Umbilicaria</i>	<i>proboscidea</i>	LC	NT
<i>Vahliella</i>	<i>leucophaea</i>	LC	NT
<i>Vezeada</i>	<i>acicularis</i>	LC	NT
<i>Alectoria</i>	<i>nigricans</i>	LC	VU
<i>Allantoparmelia</i>	<i>alpicola</i>	LC	VU
<i>Arthonia</i>	<i>lignariella</i>	LC	VU
<i>Arthonia</i>	<i>mediella</i>	LC	VU
<i>Arthopyrenia</i>	<i>carneobrunneola</i>	LC	VU
<i>Bacidia</i>	<i>absistens</i>	LC	VU
<i>Belonia</i>	<i>russula</i>	LC	VU
<i>Bryoria</i>	<i>bicolor</i>	LC	VU
<i>Bryoria</i>	<i>chalybeiformis</i>	LC	VU
<i>Bryoria</i>	<i>fuscescens</i> var. <i>fuscescens</i>	LC	VU
<i>Catillaria</i>	<i>contristans</i>	LC	VU
<i>Cetraria</i>	<i>sepincola</i>	LC	VU
<i>Chaenotheca</i>	<i>brachypoda</i>	LC	VU
<i>Chaenotheca</i>	<i>stemonea</i>	LC	VU
<i>Cladonia</i>	<i>macrophylla</i>	LC	VU
<i>Cladonia</i>	<i>sulphurina</i>	LC	VU
<i>Coccotrema</i>	<i>citrinescens</i>	LC	VU
<i>Degelia</i>	<i>atlantica</i>	LC	VU
<i>Degelia</i>	<i>plumbea</i>	LC	VU
<i>Frutidella</i>	<i>caesioatra</i>	LC	VU
<i>Fuscopannaria</i>	<i>mediterranea</i>	LC	VU
<i>Ionaspis</i>	<i>odora</i>	LC	VU
<i>Koerberiella</i>	<i>wimmeriana</i>	LC	VU
<i>Lecanora</i>	<i>cenisia</i> var. <i>cenisia</i>	LC	VU
<i>Lecidea</i>	<i>silacea</i>	LC	VU
<i>Lempholemma</i>	<i>botryosum</i>	LC	VU
<i>Leptogium</i>	<i>burgessii</i>	LC	VU
<i>Leptogium</i>	<i>tenuissimum</i>	LC	VU
<i>Leptorhaphis</i>	<i>atomaria</i>	LC	VU
<i>Lobaria</i>	<i>amplissima</i>	LC	VU

Taxon		GB Red List	Wales Red List
<i>Lobaria</i>	<i>pulmonaria</i>	LC	VU
<i>Melanelia</i>	<i>hepatizon</i>	LC	VU
<i>Menegazzia</i>	<i>terebrata</i>	LC	VU
<i>Micarea</i>	<i>marginata</i>	LC	VU
<i>Micarea</i>	<i>pseudomarginata</i>	LC	VU
<i>Microcalicium</i>	<i>ahlneri</i>	LC	VU
<i>Microcalicium</i>	<i>disseminatum</i>	LC	VU
<i>Miriquidica</i>	<i>atrofulva</i>	LC	VU
<i>Mycoblastus</i>	<i>affinis</i>	LC	VU
<i>Normandina</i>	<i>acroglypta</i>	LC	VU
<i>Opegrapha</i>	<i>fumosa</i>	LC	VU
<i>Orphniospora</i>	<i>moriopsis</i> var. <i>moriopsis</i>	LC	VU
<i>Peltigera</i>	<i>polydactylon</i>	LC	VU
<i>Pertusaria</i>	<i>amarescens</i>	LC	VU
<i>Pertusaria</i>	<i>chiodectonoides</i>	LC	VU
<i>Pertusaria</i>	<i>dactylina</i>	LC	VU
<i>Pertusaria</i>	<i>monogona</i>	LC	VU
<i>Placynthiella</i>	<i>hyporhoda</i>	LC	VU
<i>Placynthium</i>	<i>flabellum</i>	LC	VU
<i>Protoblastenia</i>	<i>siebenhaariana</i>	LC	VU
<i>Protoparmelia</i>	<i>montagnei</i>	LC	VU
<i>Protothelenella</i>	<i>sphinctrinoidella</i>	LC	VU
<i>Psoroma</i>	<i>hypnorum</i>	LC	VU
<i>Pyrenula</i>	<i>laevigata</i>	LC	VU
<i>Pyrenula</i>	<i>occidentalis</i>	LC	VU
<i>Rhizocarpon</i>	<i>anaperum</i>	LC	VU
<i>Rhizocarpon</i>	<i>badioatrum</i>	LC	VU
<i>Rinodina</i>	<i>fimbriata</i>	LC	VU
<i>Ropalospora</i>	<i>lugubris</i> f. <i>lugubris</i>	LC	VU
<i>Schismatomma</i>	<i>cretaceum</i>	LC	VU
<i>Schismatomma</i>	<i>niveum</i>	LC	VU
<i>Staurothele</i>	<i>hymenogonia</i>	LC	VU
<i>Sticta</i>	<i>canariensis</i> / <i>dufourii</i>	LC	VU
<i>Sticta</i>	<i>fuliginosa</i>	LC	VU
<i>Strigula</i>	<i>jamesii</i>	LC	VU
<i>Strigula</i>	<i>phaea</i>	LC	VU
<i>Strigula</i>	<i>stigmatella</i> var. <i>alpestris</i>	LC	VU
<i>Thelidium</i>	<i>fontigenum</i>	LC	VU
<i>Thelidium</i>	<i>impressum</i>	LC	VU
<i>Thelidium</i>	<i>papulare</i> f. <i>sorediatum</i>	LC	VU
<i>Toninia</i>	<i>fusispora</i>	LC	VU
<i>Xylographa</i>	<i>parallela</i>	LC	VU

Table 5. The 241 taxa that are “doing worse” in Wales than they are in Britain, arranged by decreasing British threat category. Taxa are included if they are threatened (EN, VU) or near threatened (NT) in Britain but have a higher threat category in Wales, or if they are Least Concern (LC) in Britain but are threatened or near threatened in Wales. Taxa that are threatened in Britain but extinct in Wales (EX or RE) are excluded (see section 7.2).

7.5 Taxa reaching the edge of their range in Wales

Many taxa reach the northern or southern edges of their British ranges in Wales (Tables 6 & 7). It is becoming increasingly important to identify such species in order to select priorities for conservation and for monitoring the impacts of climate change. Small, edge-of-range populations of species that might be vulnerable to change are particularly important, as they may be genetically distinct.

Of species at the northernmost edge of their range in Wales listed in Table 6, *Parmelinopsis minarum* and *Parmelina carporrhizans* may both have shown a genuine northerly extension to their ranges in recent years. Perhaps of greater conservation concern are the larger numbers of montane and sub-montane species that occur in tiny populations at the southernmost edge of their range in Wales and comprise a large element of Table 7. They may be particularly vulnerable to a warming climate.

Taxon		Wales Red List
<i>Arthonia</i>	<i>astroidestera</i>	NT
<i>Arthonia</i>	<i>atlantica</i>	NT
<i>Blarneya</i>	<i>hibernica</i>	CR
<i>Byssoloma</i>	<i>subdiscordans</i>	EN
<i>Heterodermia</i>	<i>leucomela</i>	VU
<i>Lecanora</i>	<i>ochroidea</i>	LC
<i>Melaspilea</i>	<i>amota</i> [F]	DD
<i>Opegrapha</i>	<i>prosodea</i>	VU
<i>Parmelina</i>	<i>carporrhizans</i>	VU
<i>Parmelinopsis</i>	<i>horrescens</i>	NT
<i>Parmelinopsis</i>	<i>minarum</i>	VU
<i>Parmotrema</i>	<i>robustum</i>	CR
<i>Pertusaria</i>	<i>velata</i>	VU
<i>Phaeographis</i>	<i>inusta</i>	LC
<i>Porina</i>	<i>curmowii</i>	VU
<i>Protoparmelia</i>	<i>montagnei</i>	VU
<i>Rinodina</i>	<i>biloculata</i>	VU
<i>Roccella</i>	<i>fuciformis</i>	NT
<i>Roccella</i>	<i>phycopsis</i>	NT
<i>Syncesia</i>	<i>myrticola</i>	VU
<i>Teloschistes</i>	<i>flavicans</i>	VU

Table 6. Taxa that reach the northern edge of their British distribution in Wales.

Taxon		Wales Red List
<i>Acarospora</i>	<i>badiofusca</i>	VU
<i>Acarospora</i>	<i>benedarensis</i>	DD
<i>Agonimia</i>	<i>repleta</i>	DD
<i>Ainoa</i>	<i>mooreana</i>	NT
<i>Alectoria</i>	<i>nigricans</i>	VU
<i>Allantoparmelia</i>	<i>alpicola</i>	VU
<i>Amygdalaria</i>	<i>consentiens</i>	NT
<i>Amygdalaria</i>	<i>pelobotryon</i>	LC
<i>Arthopyrenia</i>	<i>carneobrunneola</i>	VU
<i>Aspicilia</i>	<i>intermutans</i>	DD
<i>Aspicilia</i>	<i>recedens</i>	DD
<i>Atla</i>	<i>wheldonii</i>	NT
<i>Bacidia</i>	<i>carneoglauca</i>	LC
<i>Bacidia</i>	<i>subincompta</i>	RE
<i>Baeomyces</i>	<i>carneus</i>	DD
<i>Belonia</i>	<i>russula</i>	VU
<i>Biatora</i>	<i>globulosa</i>	CR
<i>Biatoridium</i>	<i>delitescens</i>	CR
<i>Biatoridium</i>	<i>monasteriense</i>	CR
<i>Buellia</i>	<i>uberior</i>	DD
<i>Caloplaca</i>	<i>obliterans</i>	LC
<i>Caloplaca</i>	<i>scopularis</i>	NT
<i>Carbonea</i>	<i>vorticosa</i>	DD
<i>Catillaria</i>	<i>contristans</i>	VU
<i>Catillaria</i>	<i>scotinodes</i>	NT
<i>Catillaria</i>	<i>subviridis</i>	DD
<i>Cetraria</i>	<i>ericetorum</i>	RE
<i>Cetraria</i>	<i>sepincola</i>	VU
<i>Cladonia</i>	<i>borealis</i>	DD
<i>Cladonia</i>	<i>crispata crispata</i>	DD
<i>Cladonia</i>	<i>rangiferina</i>	NT
<i>Cladonia</i>	<i>stygia</i>	VU
<i>Cladonia</i>	<i>sulphurina</i>	VU
<i>Coccotrema</i>	<i>citrinescens</i>	VU
<i>Collema</i>	<i>fasciculare</i>	NT
<i>Collema</i>	<i>glebulentum</i>	NT
<i>Collema</i>	<i>undulatum</i> var. <i>undulatum</i>	DD
<i>Dermatocarpon</i>	<i>rivulorum</i>	DD
<i>Epigloea</i>	<i>bactrospora</i>	DD
<i>Fellhanera</i>	<i>duplex</i>	DD
<i>Frutidella</i>	<i>caesioatra</i>	VU
<i>Fuscidea</i>	<i>austera</i>	DD
<i>Fuscidea</i>	<i>intercincta</i>	NT
<i>Fuscidea</i>	<i>mollis</i>	VU
<i>Gomphillus</i>	<i>calycioides</i>	EN
<i>Gyalecta</i>	<i>foveolaris</i>	EN
<i>Gyalidea</i>	<i>fritzei</i>	EN
<i>Hymenelia</i>	<i>heteromorpha</i>	VU
<i>Hypocenomyce</i>	<i>friesii</i>	NT
<i>Ionaspis</i>	<i>chrysophana</i>	VU
<i>Ionaspis</i>	<i>odora</i>	VU
<i>Jamesiella</i>	<i>scotica</i>	DD
<i>Koerberiella</i>	<i>wimmeriana</i>	VU
<i>Lecanora</i>	<i>achariana</i>	EN
<i>Lecanora</i>	<i>caesiosora</i>	DD

Taxon		Wales Red List
<i>Lecanora</i>	<i>cenisia</i> var. <i>cenisia</i>	VU
<i>Lecanora</i>	<i>rupicola</i> var. <i>efflorens</i>	DD
<i>Lecidea</i>	<i>berengeriana</i>	VU
<i>Lecidea</i>	<i>endomelaena</i>	NT
<i>Lecidea</i>	<i>promixta</i>	LC
<i>Lecidea</i>	<i>silacea</i>	VU
<i>Lecidea</i>	<i>swartzioidea</i>	LC
<i>Lecidoma</i>	<i>demissum</i>	LC
<i>Lempholemma</i>	<i>cladodes</i>	VU
<i>Lempholemma</i>	<i>intricatum</i>	VU
<i>Lempholemma</i>	<i>radiatum</i>	VU
<i>Leptogium</i>	<i>subtorulosum</i>	EN
<i>Leptorhaphis</i>	<i>atomaria</i> [F]	VU
<i>Melanelia</i>	<i>commixta</i>	NT
<i>Melanelia</i>	<i>stygia</i>	CR
<i>Melaspilea</i>	<i>granitophila</i>	LC
<i>Melaspilea</i>	<i>interjecta</i>	DD
<i>Micarea</i>	<i>hedlundii</i>	NT
<i>Micarea</i>	<i>marginata</i>	VU
<i>Micarea</i>	<i>submilliaria</i>	VU
<i>Micarea</i>	<i>ternaria</i>	DD
<i>Micarea</i>	<i>turfosa</i>	VU
<i>Miriquidica</i>	<i>atrolfulva</i>	VU
<i>Miriquidica</i>	<i>complanata</i> f. <i>complanata</i>	RE
<i>Miriquidica</i>	<i>lulensis</i>	VU
<i>Miriquidica</i>	<i>pycnocarpa</i> f. <i>sorediata</i>	LC
<i>Mycoblastus</i>	<i>affinis</i>	VU
<i>Mycomicrothelia</i>	<i>atlantica</i> [F]	VU
<i>Ochrolechia</i>	<i>frigida</i> f. <i>frigida</i>	NT
<i>Ochrolechia</i>	<i>inaequatula</i>	DD
<i>Orphniospora</i>	<i>moriopsis</i> var. <i>moriopsis</i>	VU
<i>Peltigera</i>	<i>britannica</i>	NT
<i>Peltigera</i>	<i>degenii</i>	LC
<i>Peltigera</i>	<i>elizabethae</i>	NT
<i>Peltigera</i>	<i>venosa</i>	CR
<i>Pertusaria</i>	<i>excludens</i>	LC
<i>Placynthium</i>	<i>asperellum</i>	VU
<i>Placynthium</i>	<i>dolichoterum</i>	VU
<i>Placynthium</i>	<i>flabellousum</i>	VU
<i>Placynthium</i>	<i>pannariellum</i>	VU
<i>Polyblastia</i>	<i>efflorescens</i>	VU
<i>Polyblastia</i>	<i>inumbrata</i>	DD
<i>Polyblastia</i>	<i>melaspora</i>	LC
<i>Polyblastia</i>	<i>philaea</i>	DD
<i>Polyblastia</i>	<i>quartzina</i>	VU
<i>Polyblastia</i>	<i>terrestris</i>	VU
<i>Porina</i>	<i>byssophila</i>	VU
<i>Porina</i>	<i>grandis</i>	VU
<i>Porocyphus</i>	<i>leptogiella</i>	NT
<i>Porpidia</i>	<i>melinodes</i>	LC
<i>Porpidia</i>	<i>superba</i> f. <i>superba</i>	NT?
<i>Porpidia</i>	<i>superba</i> f. <i>sorediata</i>	NT?
<i>Protoblastenia</i>	<i>siebenhaariana</i>	VU
<i>Protoparmelia</i>	<i>atriseda</i>	NT
<i>Protothelenella</i>	<i>corrosa</i>	NT

Taxon		Wales Red List
<i>Protothelenella</i>	<i>sphinctrinoidella</i>	VU
<i>Protothelenella</i>	<i>sphinctrinoides</i>	VU
<i>Pseudocyphellaria</i>	<i>intricata</i>	CR
<i>Pseudocyphellaria</i>	<i>lacerata</i>	CR
<i>Pseudocyphellaria</i>	<i>norvegica</i>	CR
<i>Pyrenopsis</i>	<i>grumulifera</i>	DD
<i>Pyrenopsis</i>	<i>impolita</i>	DD
<i>Pyrenopsis</i>	<i>subareolata</i>	LC
<i>Pyrenula</i>	<i>hibernica</i>	CR
<i>Ramalina</i>	<i>polymorpha</i>	NT
<i>Rhizocarpon</i>	<i>alpicola</i>	LC
<i>Rhizocarpon</i>	<i>amphibium</i>	DD
<i>Rhizocarpon</i>	<i>caeruleoalbum</i>	DD
<i>Rhizocarpon</i>	<i>caesium</i>	DD
<i>Rhizocarpon</i>	<i>cinereovirens</i>	NT
<i>Rhizocarpon</i>	<i>geminatum</i>	DD
<i>Rhizocarpon</i>	<i>intermediellum</i>	VU
<i>Rhizocarpon</i>	<i>submodestum</i>	DD
<i>Rhizocarpon</i>	<i>superficiale</i>	VU
<i>Rinodina</i>	<i>milvina</i>	VU
<i>Ropalospora</i>	<i>lugubris</i> f. <i>lugubris</i>	VU
<i>Schaereria</i>	<i>corticola</i>	CR
<i>Stereocaulon</i>	<i>glareosum</i>	VU
<i>Stereocaulon</i>	<i>tornense</i>	VU
<i>Strangospora</i>	<i>microhaema</i>	CR
<i>Strigula</i>	<i>stigmatella</i> var. <i>alpestris</i>	VU
<i>Strigula</i>	<i>thelopsidoides</i>	CR
<i>Tephromela</i>	<i>pertusarioides</i>	DD
<i>Thamnotia</i>	<i>vermicularis</i> ssp. <i>subuliformis</i>	VU
<i>Thelidium</i>	<i>papulare</i> f. <i>sorediatum</i>	VU
<i>Thelidium</i>	<i>pluvium</i>	NT
<i>Thelocarpon</i>	<i>impressellum</i>	LC
<i>Thelopsis</i>	<i>melathelia</i>	VU
<i>Tomasellia</i>	<i>diffusa</i> [F]	RE?
<i>Toninia</i>	<i>fusispora</i>	VU
<i>Umbilicaria</i>	<i>hirsuta</i>	NT
<i>Umbilicaria</i>	<i>proboscidea</i>	NT
<i>Verrucaria</i>	<i>pachyderma</i>	DD
<i>Vestergrenopsis</i>	<i>elaeina</i>	CR
<i>Veizdaea</i>	<i>acicularis</i>	NT
<i>Xylographa</i>	<i>parallela</i>	VU

Table 7. Taxa that reach the southern edge of their British distribution in Wales

Taxon		Wales Red List
<i>Bacidia</i>	<i>adastra</i>	LC
<i>Biatora</i>	<i>britannica</i>	DD
<i>Buellia</i>	<i>badia</i>	LC
<i>Pleurosticta</i>	<i>acetabulum</i>	DD

Table 8. Taxa that reach the westernmost edge of their British distribution in Wales

7.6 Species for which Wales has a particular responsibility

Woods & Coppins (2003) consider that where the British population of any taxon exceeds 10% of the total world population Britain has an international responsibility towards the conservation of that taxon. They are listed in Table 9. Where that species is endemic or probably endemic to Britain and Ireland it is shown in bold type.

Taxon		Wales Red List
<i>Blarneya</i>	<i>hibernica</i>	CR
<i>Collema</i>	<i>fasciculare</i>	CR
<i>Lobaria</i>	<i>scrobiculata</i>	CR
<i>Pannaria</i>	<i>rubiginosa</i>	CR
<i>Parmeliella</i>	<i>testacea</i>	CR
<i>Pseudocyphellaria</i>	<i>intricata</i>	CR
<i>Pseudocyphellaria</i>	<i>lacerata</i>	CR
<i>Pseudocyphellaria</i>	<i>norvegica</i>	CR
<i>Pyrenula</i>	<i>hibernica</i>	CR
<i>Strangospora</i>	<i>microhaema</i>	CR
<i>Fuscopannaria</i>	<i>sampaiana</i>	EN
<i>Gomphillus</i>	<i>calycioides</i>	EN
Graphina	pauciloculata	EN
<i>Lecanographa</i>	<i>amylacea</i>	EN
<i>Lecanographa</i>	<i>lyncea</i>	EN
<i>Lobaria</i>	<i>virens</i>	EN
<i>Sticta</i>	<i>canariensis</i> independ. green morph.	EN
<i>Agonimia</i>	<i>octospora</i>	VU
Arthopyrenia	carneobrunneola	VU
<i>Cryptolechia</i>	<i>carneolutea</i>	VU
<i>Degelia</i>	<i>atlantica</i>	VU
<i>Degelia</i>	<i>ligulata</i>	VU
<i>Degelia</i>	<i>plumbea</i>	VU
<i>Heterodermia</i>	<i>leucomela</i>	VU
<i>Lecanora</i>	<i>quercicola</i>	VU
<i>Leptogium</i>	<i>brebissonii</i>	VU
<i>Leptogium</i>	<i>burgessii</i>	VU
<i>Leptogium</i>	<i>cochleatum</i>	VU
<i>Lobaria</i>	<i>amplissima</i>	VU
<i>Lobaria</i>	<i>pulmonaria</i>	VU
<i>Megalospora</i>	<i>tuberculosa</i>	VU
<i>Menegazzia</i>	<i>terebrata</i>	VU
Micarea	pseudomarginata	VU
<i>Opegrapha</i>	<i>fumosa</i>	VU
<i>Opegrapha</i>	<i>prosodea</i>	VU
<i>Pertusaria</i>	<i>velata</i>	VU
<i>Phaeographis</i>	<i>lyellii</i>	VU
<i>Porina</i>	<i>hibernica</i>	VU
<i>Pyrenula</i>	<i>laevigata</i>	VU
<i>Pyrenula</i>	<i>occidentalis</i>	VU
Ramonia	dictyospora	VU

Taxon		Wales Red List
<i>Schismatomma</i>	<i>cretaceum</i>	VU
<i>Schismatomma</i>	<i>graphidioides</i>	VU
<i>Schismatomma</i>	<i>niveum</i>	VU
<i>Stereocaulon</i>	<i>delisei</i>	VU
<i>Stereocaulon</i>	<i>plicatile</i>	VU
<i>Sticta</i>	<i>canariensis / dufourii</i>	VU
<i>Sticta</i>	<i>fuliginosa</i>	VU
<i>Syncesia</i>	<i>myrticola</i>	VU
<i>Usnea</i>	<i>articulata</i>	VU
<i>Wadeana</i>	<i>dendrographa</i>	VU
<i>Melaspilea</i>	<i>lentiginosa</i>	NE
<i>Agonimia</i>	<i>wheldonii</i>	NT
<i>Arthonia</i>	<i>anombrophila</i>	NT
<i>Arthonia</i>	<i>astroidestra</i>	NT
Arthonia	atlantica	NT
<i>Atla</i>	<i>wheldonii</i>	NT
<i>Cresponea</i>	<i>premnea</i>	NT
<i>Hypotrachyna</i>	<i>sinuosa</i>	NT
<i>Hypotrachyna</i>	<i>taylorensis</i>	NT
<i>Lecania</i>	<i>chlorotiza</i>	NT
<i>Lecanora</i>	<i>sublivescens</i>	NT
<i>Leptogium</i>	<i>britannicum</i>	NT
<i>Leptogium</i>	<i>cyanescens</i>	NT
<i>Micarea</i>	<i>pycnidiophora</i>	NT
<i>Nephroma</i>	<i>laevigatum</i>	NT
<i>Pannaria</i>	<i>conoplea</i>	NT
<i>Parmeliella</i>	<i>parvula</i>	NT
<i>Parmeliella</i>	<i>triptophylla</i>	NT
<i>Parmelinopsis</i>	<i>horrescens</i>	NT
<i>Peltigera</i>	<i>britannica</i>	NT
<i>Peltigera</i>	<i>collina</i>	NT
<i>Phyllopsora</i>	<i>rosei</i>	NT
<i>Porina</i>	<i>coralloidea</i>	NT
<i>Porina</i>	<i>rosei</i>	NT
<i>Ptychographa</i>	<i>xylographoides</i>	NT
<i>Ramonia</i>	<i>chrysophaea</i>	NT
<i>Rinodina</i>	<i>isidioides</i>	NT
Schismatomma	quercicola	NT
<i>Sticta</i>	<i>limbata</i>	NT
<i>Sticta</i>	<i>sylvatica</i>	NT
<i>Thelocarpon</i>	<i>magnussonii</i>	NT
Acarospora	benedarensis	DD
Caloplaca	britannica	DD
<i>Caloplaca</i>	<i>ferruginea</i>	DD
<i>Cryptothele</i>	<i>rhodosticta</i>	DD
<i>Eopyrenula</i>	<i>avellanae</i>	DD
<i>Jamesiella</i>	<i>scotica</i>	DD
<i>Melaspilea</i>	<i>interjecta</i>	DD
<i>Micarea</i>	<i>lgnaria endoleuca</i>	DD
<i>Nephroma</i>	<i>tangeriense</i>	DD
<i>Pertusaria</i>	<i>ophthalmiza</i>	DD
<i>Ramalina</i>	<i>portuensis</i>	DD
<i>Thelocarpon</i>	<i>opertum</i>	DD
<i>Usnea</i>	<i>esperantiana</i>	DD
<i>Usnea</i>	<i>glabrata</i>	DD

Taxon		Wales Red List
<i>Wadeana</i>	<i>minuta</i>	DD
<i>Anisomeridium</i>	<i>viridescens</i>	LC
<i>Arthonia</i>	<i>ilicina</i>	LC
<i>Calicium</i>	<i>lenticulare</i>	LC
<i>Eopyrenula</i>	<i>grandicula</i>	LC
<i>Graphina</i>	<i>ruiziana</i>	LC
<i>Gyalideopsis</i>	<i>muscicola</i>	LC
<i>Hypotrachyna</i>	<i>endochlora</i>	LC
<i>Lecanactis</i>	<i>subabietinum</i>	LC
<i>Micarea</i>	<i>alabastrites</i>	LC
<i>Micarea</i>	<i>stipitata</i>	LC
<i>Micarea</i>	<i>synotheoides</i>	LC
<i>Micarea</i>	<i>xanthonica</i>	LC
<i>Opegrapha</i>	<i>corticola</i>	LC
<i>Opegrapha</i>	<i>saxigena</i>	LC
<i>Opegrapha</i>	<i>xerica</i>	LC
<i>Phaeographis</i>	<i>inusta</i>	LC
<i>Polyblastia</i>	<i>agraria</i>	LC
<i>Ramalina</i>	<i>fraxinea</i>	LC
<i>Rinodina</i>	<i>roboris</i> var. <i>roboris</i>	LC
<i>Schismatomma</i>	<i>umbrinum</i>	LC
<i>Stenocybe</i>	<i>septata</i> [F]	LC
<i>Strigula</i>	<i>taylorii</i>	LC

Table 9. Species with British populations of international importance.

A very crude assessment of responsibility within Britain has also been made by comparing the number of hectads occupied by each taxon in Wales with those in Britain. From the total British figure, a simple proportion of hectads that occur in Wales was calculated. Where possible, adjustments have been made for hectads that straddle the English-Welsh border. Any taxon for which Wales has 20% or more of the GB population whether threatened or not in Wales is listed in Table 10.

Taxon		Wales Red Data List	% of GB Population
<i>Placynthium</i>	<i>hungaricum</i>	DD	100?
<i>Arthothelium</i>	<i>spectabile</i>	EX	100
<i>Buellia</i>	<i>spuria</i>	DD	100
<i>Cladonia</i>	<i>alpina</i>	LC	100
<i>Cryptothele</i>	<i>rhodosticta</i>	DD	100
<i>Epigloea</i>	<i>filifera</i>	DD	100
<i>Gyalideopsis</i>	<i>crenulata</i>	DD	100
<i>Lepraria</i>	<i>nylanderiana</i>	DD	100
<i>Placynthium</i>	<i>anemoideum</i>	EX?	100
<i>Porpidia</i>	<i>ochrolemma</i>	DD	100
<i>Staurothele</i>	<i>rufa</i>	EN	100
<i>Thelocarpon</i>	<i>saxicola</i>	DD	100
<i>Trapeliopsis</i>	<i>aeneofusca</i>	DD	100
<i>Gyalidea</i>	<i>subscutellaris</i>	NT	92
<i>Lecanora</i>	<i>strobilina</i>	VU	83
<i>Protoparmelia</i>	<i>atriseda</i>	NT	83
<i>Verrucaria</i>	<i>pachyderma</i>	DD	82
<i>Porina</i>	<i>byssophila</i>	VU	80
<i>Placynthiella</i>	<i>hyporhoda</i>	VU	80
<i>Ve zdaea</i>	<i>cobria</i>	LC	80
<i>Parmotrema</i>	<i>robustum</i>	CR	75
<i>Cladonia</i>	<i>azorica</i>	LC	73
<i>Ve zdaea</i>	<i>acicularis</i>	NT	71
<i>Coppinsia</i>	<i>minutissima</i>	LC	69
<i>Buellia</i>	<i>hyperbolica</i>	EN	67
<i>Endocarpon</i>	<i>adscendens</i>	CR	67
<i>Aspicilia</i>	<i>intermutans</i>	DD	67
<i>Aspicilia</i>	<i>recedens</i>	DD	67
<i>Cladonia</i>	<i>peziziformis</i>	NT	67
<i>Lecidea</i>	<i>endomelaena</i>	NT	67
<i>Verrucaria</i>	<i>bulgarica</i>	LC	67
<i>Absconditella</i>	<i>celata</i>	DD	66
<i>Bacidia</i>	<i>fuscoviridis</i>	LC	66?
<i>Ve zdaea</i>	<i>rheocarpa</i>	LC	65
<i>Absconditella</i>	<i>trivialis</i>	NT	63
<i>Tephromela</i>	<i>pertusarioides</i>	DD	63
<i>Lecanora</i>	<i>gisleriana</i>	VU	60
<i>Melaspilea</i>	<i>interjecta</i>	DD	60
<i>Polyblastia</i>	<i>philaea</i>	DD	60
<i>Pyrenopsis</i>	<i>impolita</i>	DD	60
<i>Rinodina</i>	<i>immersa</i>	DD	60
<i>Porina</i>	<i>guentheri</i> var. <i>lucens</i>	LC	58
<i>Epigloea</i>	<i>medioincrassata</i>	DD	57
<i>Fellhaneropsis</i>	<i>myrtillicola</i>	LC	56
<i>Rhizocarpon</i>	<i>furfurosum</i>	NT	56
<i>Rhizocarpon</i>	<i>cinereovirens</i>	NT	55
<i>Rhizocarpon</i>	<i>anaperum</i>	VU	50
<i>Stereocaulon</i>	<i>glareosum</i>	VU	50
<i>Caloplaca</i>	<i>atroflava</i>	DD	50
<i>Cladonia</i>	<i>norvegica</i>	DD	50
<i>Lecanora</i>	<i>ochroidea</i>	LC	50
<i>Lichenomphalia</i>	<i>velutina</i>	LC	50
<i>Micarea</i>	<i>globulosella</i>	DD	50
<i>Polyblastia</i>	<i>quartzina</i>	VU	50
<i>Ramalina</i>	<i>polymorpha</i>	NT	50

A Lichen Red Data List for Wales

Taxon		Wales Red Data List	% of GB Population
<i>Rhizocarpon</i>	<i>submodestum</i>	DD	50
<i>Rinodina</i>	<i>conradii</i>	LC	50
<i>Schaereria</i>	<i>corticola</i>	CR	50
<i>Thelocarpon</i>	<i>impresellum</i>	LC	50
<i>Thelocarpon</i>	<i>robustum</i>	DD	50
<i>Verrucaria</i>	<i>madida</i>	DD	50
<i>Leptogium</i>	<i>palmatum</i>	LC	49
<i>Parmelinopsis</i>	<i>horrescens</i>	NT	49
<i>Arthonia</i>	<i>ligniaria</i>	LC	47
<i>Lecidea</i>	<i>swartzioidea</i>	LC	47
<i>Leptogium</i>	<i>intermedium</i>	LC	47
<i>Lecanactis</i>	<i>dilleniana</i>	LC	46
<i>Lecanora</i>	<i>semipallida</i>	LC	46
<i>Dermatocarpon</i>	<i>leptophyllodes</i>	NT	45
<i>Pterygiopsis</i>	<i>lacustris</i>	VU	44
<i>Collema</i>	<i>fragile</i>	NT	44
<i>Toninia</i>	<i>thiopsora</i>	LC	44
<i>Anisomeridium</i>	<i>robustum</i>	NT	43
<i>Caloplaca</i>	<i>herbidella</i>	VU	43
<i>Gyalecta</i>	<i>biformis</i>	VU	43
<i>Leptogium</i>	<i>subtile</i>	LC	43
<i>Scoliciosporum</i>	<i>curvatum</i>	LC	43
<i>Verrucaria</i>	<i>internigrescens</i>	LC	43
<i>Caloplaca</i>	<i>alociza</i>	LC	42
<i>Caloplaca</i>	<i>lucifuga</i>	VU	42
<i>Ephebe</i>	<i>hispidula</i>	DD	42
<i>Polysporina</i>	<i>lapponica</i>	LC	42
<i>Lecidea</i>	<i>fuliginosa</i>	LC	41
<i>Sarcosagium</i>	<i>campestre</i> var. <i>macrosporum</i>	NT	41
<i>Thrombium</i>	<i>epigaeum</i>	LC	41
<i>Degelia</i>	<i>ligulata</i>	VU	40
<i>Protoparmeliopsis</i>	<i>achariana</i>	EN	40
<i>Lecidea</i>	<i>promixta</i>	LC	40
<i>Micarea</i>	<i>farinosa</i>	DD	40
<i>Polyblastia</i>	<i>agraria</i>	LC	40
<i>Umbilicaria</i>	<i>hirsuta</i>	NT	40
<i>Verrucaria</i>	<i>bryoctona</i>	LC	40
<i>Verrucaria</i>	<i>latericola</i>	DD	40
<i>Xerotrema</i>	<i>quercicola</i>	LC	40
<i>Collemopsidium</i>	<i>elegans</i>	LC	39
<i>Rhizocarpon</i>	<i>infernulum</i> f. <i>infernulum</i>	LC	39
<i>Rimularia</i>	<i>insularis</i>	LC	39
<i>Lecanora</i>	<i>cenisia</i> var. <i>cenisia</i>	VU	38
<i>Caloplaca</i>	<i>obliterans</i>	LC	38
<i>Lecania</i>	<i>suavis</i>	DD	38
<i>Porocyphus</i>	<i>kenmorensis</i>	NT	38
<i>Caloplaca</i>	<i>maritima</i>	LC	37
<i>Lecanora</i>	<i>handelii</i>	NT	37
<i>Placopsis</i>	<i>lambii</i>	LC	37
<i>Dermatocarpon</i>	<i>meiophyllizum</i>	NT	36
<i>Arthonia</i>	<i>atlantica</i>	NT	36
<i>Leptogium</i>	<i>diffractum</i>	NT	36
<i>Rinodina</i>	<i>isidioides</i>	NT	36
<i>Mycoblastus</i>	<i>affinis</i>	VU	35
<i>Steinia</i>	<i>geophana</i>	LC	34

Taxon		Wales Red Data List	% of GB Population
<i>Dirina</i>	<i>massiliensis</i> f. <i>massiliensis</i>	VU	33
<i>Microcalicium</i>	<i>ahlneri</i>	VU	33
<i>Rinodina</i>	<i>milvina</i>	VU	33
<i>Strigula</i>	<i>stigmatella</i> var. <i>stigmatella</i>	CR	33
<i>Buellia</i>	<i>sequax</i>	LC	33
<i>Calicium</i>	<i>adpersum</i>	CR	33
<i>Dermatocarpon</i>	<i>rivulorum</i>	DD	33
<i>Epigloea</i>	<i>bactrospora</i>	DD	33
<i>Fellhanera</i>	<i>duplex</i>	DD	33
<i>Fulgensia</i>	<i>fulgens</i>	EN	33
<i>Fuscidea</i>	<i>mollis</i>	VU	33
<i>Lecania</i>	<i>nylanderiana</i>	DD	33
<i>Rhizocarpon</i>	<i>caeruleoalbum</i>	DD	33
<i>Rhizocarpon</i>	<i>intermediellum</i>	VU	33
<i>Rhizocarpon</i>	<i>superficiale</i>	VU	33
<i>Rinodina</i>	<i>occulta</i>	NT	33
<i>Rinodina</i>	<i>roboris</i> var. <i>armeriicola</i>	NT	33
<i>Thelocarpon</i>	<i>opertum</i>	DD	33
<i>Thelocarpon</i>	<i>superellum</i>	DD	33
<i>Usnea</i>	<i>glabrata</i>	DD	33
<i>Thelidium</i>	<i>pluvium</i>	NT	32
<i>Pyrenopsis</i>	<i>subareolata</i>	LC	32
<i>Amygdalaria</i>	<i>consentiens</i>	NT	31
<i>Absconditella</i>	<i>delutula</i>	LC	31
<i>Lithographa</i>	<i>tesserata</i>	LC	31
<i>Melaspilea</i>	<i>granitophila</i>	LC	31
<i>Lecanora</i>	<i>sublivescens</i>	NT	30
<i>Phaeographis</i>	<i>inusta</i>	LC	30
<i>Synalissa</i>	<i>symphorea</i>	VU	30
<i>Verrucaria</i>	<i>calciseda</i>	LC	30
<i>Caloplaca</i>	<i>asserigena</i>	LC	29
<i>Micarea</i>	<i>coppinsii</i>	LC	29
<i>Placynthium</i>	<i>tremniacum</i>	DD	29
<i>Rinodina</i>	<i>orculariopsis</i>	LC	29
<i>Thelocarpon</i>	<i>pallidum</i>	DD	29
<i>Porpidia</i>	<i>melinodes</i>	LC	28
<i>Rimularia</i>	<i>intercedens</i>	LC	28
<i>Graphina</i>	<i>pauciloculata</i>	EN	27
<i>Miriquidica</i>	<i>lulensis</i>	VU	27
<i>Rhizocarpon</i>	<i>badioatrum</i>	VU	27
<i>Stereocaulon</i>	<i>condensatum</i>	NT	27
<i>Collemopsidium</i>	<i>orustense</i>	LC	27
<i>Micarea</i>	<i>viridileprosa</i>	LC	27
<i>Nephroma</i>	<i>tangeriense</i>	DD	27
<i>Porocyphus</i>	<i>leptogiella</i>	NT	27
<i>Ramalina</i>	<i>portuensis</i>	DD	27
<i>Lecidea</i>	<i>ahlesii</i>	LC	26
<i>Porina</i>	<i>ahlesiana</i>	NT	26
<i>Porocyphus</i>	<i>coccodes</i>	LC	26
<i>Lemmopsis</i>	<i>arnoldiana</i>	VU	25
<i>Leptogium</i>	<i>subtorulosum</i>	EN	25
<i>Pseudocyphellaria</i>	<i>lacerata</i>	CR	25
<i>Xanthoparmelia</i>	<i>tinctina</i>	EN	25
<i>Agonimia</i>	<i>repleta</i>	DD	25
<i>Bacidia</i>	<i>circumspecta</i>	VU	25

Taxon		Wales Red Data List	% of GB Population
<i>Caloplaca</i>	<i>chrysophthalma</i>	DD	25
<i>Catapyrenium</i>	<i>rufescens</i>	DD	25
<i>Collema</i>	<i>undulatum</i> var. <i>granulosum</i>	DD	25
<i>Fellhanera</i>	<i>viridisorediata</i>	DD	25
<i>Gyalidea</i>	<i>lecideopsis</i>	EN	25
<i>Lecanora</i>	<i>rugosella</i>	DD	25
<i>Melaspilea</i>	<i>amota</i>	DD	25
<i>Micarea</i>	<i>submilliaria</i>	VU	25
<i>Micarea</i>	<i>subviridescens</i>	LC	25
<i>Parmelina</i>	<i>quercina</i>	VU	25
<i>Rhizocarpon</i>	<i>eupetraeoides</i>	VU	25
<i>Stereocaulon</i>	<i>symphycheilum</i>	VU	25
<i>Polyblastia</i>	<i>inumbata</i>	DD	24
<i>Teloschistes</i>	<i>flavicans</i>	VU	23
<i>Lecanora</i>	<i>quercicola</i>	VU	22
<i>Collemopsidium</i>	<i>angermannicum</i>	NT	22
<i>Rinodina</i>	<i>flavosoralifera</i>	NT	22
<i>Stereocaulon</i>	<i>delisei</i>	VU	21
<i>Miriquidica</i>	<i>pycnocarpa</i> f. <i>sorediata</i>	LC	21
<i>Porina</i>	<i>rosei</i>	NT	21
<i>Schismatomma</i>	<i>umbrinum</i>	LC	21
<i>Collema</i>	<i>parvum</i>	VU	20
<i>Mycomicrothelia</i>	<i>atlantica</i>	VU	20
<i>Thelidium</i>	<i>impressum</i>	VU	20
<i>Thermutis</i>	<i>velutina</i>	VU	20
<i>Caloplaca</i>	<i>irrubescens</i>	DD	20
<i>Pertusaria</i>	<i>melanochlora</i>	EN	20
<i>Placynthium</i>	<i>dolichoterum</i>	VU	20
<i>Placynthium</i>	<i>subradiatum</i>	LC	20
<i>Porina</i>	<i>grandis</i>	VU	20
<i>Rhizocarpon</i>	<i>amphibium</i>	DD	20
<i>Rhizocarpon</i>	<i>simillimum</i>	DD	20
<i>Rinodina</i>	<i>aspersa</i>	NT	20
<i>Staurothele</i>	<i>guestphalica</i>	DD	20

Table 10. Threatened Welsh taxa for which Wales has 20% or more of total GB hectads, in order of decreasing proportion.

8. Lichen Red Data List for Wales

See **section 6** for an explanation of the columns (page 14).

Taxon		Wales Red List threat status	British Red List threat status	Criteria	National/international threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Absconditella</i>	<i>celata</i>	DD			LC	NR			66	
<i>Absconditella</i>	<i>delutula</i>				LC	NS			31	
<i>Absconditella</i>	<i>lignicola</i>	DD			LC	NR				
<i>Absconditella</i>	<i>trivialis</i>	NT			LC	NR			63	
<i>Acarospora</i>	<i>badiofusca</i>	VU	D2	NT	NR		S			
<i>Acarospora</i>	<i>benedarensis</i>	DD		DD	NR	E	S		?	
<i>Acarospora</i>	<i>fuscata</i>				LC					
<i>Acarospora</i>	<i>glaucocarpa</i>				LC	NS				
<i>Acarospora</i>	<i>impressula</i>				LC					
<i>Acarospora</i>	<i>macrospora</i> ssp. <i>macrospora</i>	RE		NT	NR					
<i>Acarospora</i>	<i>nitrophila</i>				LC	DD				
<i>Acarospora</i>	<i>rufescens</i>	DD			LC					
<i>Acarospora</i>	<i>sinopica</i>				LC					
<i>Acarospora</i>	<i>smaragdula</i>				LC					
<i>Acarospora</i>	<i>umbilicata</i>				LC	NS				
<i>Acarospora</i>	<i>veronensis</i>				LC	NS				
<i>Acarospora</i>	<i>verruciformis</i>	DD		DD	NR					
<i>Acrocordia</i>	<i>conoidea</i>				LC					
<i>Acrocordia</i>	<i>gemmata</i>				LC					
<i>Acrocordia</i>	<i>macrospora</i>	NT			LC	NS				
<i>Acrocordia</i>	<i>salweyi</i>				LC					
<i>Adelolecia</i>	<i>pilati</i>	DD		DD	NR					
<i>Agonimia</i>	<i>allobata</i>	NT			LC	NS				
<i>Agonimia</i>	<i>gelatinosa</i>				LC	NS				
<i>Agonimia</i>	<i>globulifera</i>	DD			LC	NS			33	
<i>Agonimia</i>	<i>octospora</i>	VU	D1	NT	NS		IR			
<i>Agonimia</i>	<i>opuntiella</i>	DD		DD	NR					
<i>Agonimia</i>	<i>repleta</i>	DD		DD	NR				25	
<i>Agonimia</i>	<i>tristicula</i>				LC					
<i>Ainoa</i>	<i>mooreana</i>	NT			LC	NS		S		
<i>Alectoria</i>	<i>nigricans</i>	VU	D1		LC			S		
<i>Allantoparmelia</i>	<i>alpicola</i>	VU	D1		LC	NS		S		
<i>Amandinea</i>	<i>coniops</i>				LC	NS				
<i>Amandinea</i>	<i>lecideina</i>				LC	?NS				
<i>Amandinea</i>	<i>punctata</i>				LC					

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Amygdalaria</i>	<i>consentiens</i>	NT		LC	NS		S	31	
<i>Amygdalaria</i>	<i>pelobotryon</i>	LC		LC			S		
<i>Anaptychia</i>	<i>ciliaris</i> ssp. <i>ciliaris</i>	EN	C2ai	EN					P*
<i>Anaptychia</i>	<i>ciliaris</i> ssp. <i>mamillata</i>	NT		NT	NS				
<i>Anaptychia</i>	<i>runcinata</i>	LC		LC					
<i>Anisomeridium</i>	<i>biforme</i>	LC		LC					
<i>Anisomeridium</i>	<i>polypori</i>	LC		LC					
<i>Anisomeridium</i>	<i>ranunculosporum</i>	LC		LC					
<i>Anisomeridium</i>	<i>robustum</i>	NT		LC	NR	?E		43	
<i>Anisomeridium</i>	<i>viridescens</i>	LC		LC	NS	IR			
<i>Arctoparmelia</i>	<i>incurva</i>	LC		LC					
<i>Arthonia</i>	<i>anombrophila</i>	NT		LC	NS	IR?			
<i>Arthonia</i>	<i>arthonioides</i>	LC		LC	NS				
<i>Arthonia</i>	<i>astroidestera</i>	NT		NT	NS	IR	N		
<i>Arthonia</i>	<i>atlantica</i>	NT		NT	NR	?E	N	36	P*
<i>Arthonia</i>	<i>cinnabarina</i>	LC		LC					
<i>Arthonia</i>	<i>didyma</i>	LC		LC					
<i>Arthonia</i>	<i>elegans</i>	LC		LC					
<i>Arthonia</i>	<i>endlicheri</i>	LC		LC	?NS				
<i>Arthonia</i>	<i>ilicina</i>	LC		LC		IR			
<i>Arthonia</i>	<i>lapidicola</i>	LC		LC					
<i>Arthonia</i>	<i>leucopellaea</i>	LC		LC	NS				
<i>Arthonia</i>	<i>ligniaria</i>	LC		LC	NS			47	
<i>Arthonia</i>	<i>ligniariella</i>	VU	D1	LC	NR				
<i>Arthonia</i>	<i>mediella</i>	VU	D1	LC	NS				
<i>Arthonia</i>	<i>muscigena</i>	LC		LC	NS				
<i>Arthonia</i>	<i>phaeobaea</i>	LC		LC	NS				
<i>Arthonia</i>	<i>pruinata</i>	LC		LC					
<i>Arthonia</i>	<i>punctiformis</i> [F]	LC		LC					
<i>Arthonia</i>	<i>punctilliformis</i> [F]	EX?		NE	NR	E			
<i>Arthonia</i>	<i>radiata</i>	LC		LC					
<i>Arthonia</i>	<i>spadicea</i>	LC		LC					
<i>Arthonia</i>	<i>stellaris</i>	LC		LC	NS				
<i>Arthonia</i>	<i>vinosa</i>	NT		LC					
<i>Arthonia</i>	<i>zwackhii</i>	VU	D1	NT	NR				
<i>Arthopyrenia</i>	<i>analepta</i> [F]	LC		LC					
<i>Arthopyrenia</i>	<i>atractospora</i>	DD		NT	NR				
<i>Arthopyrenia</i>	<i>carneobrunneola</i>	VU	D1	LC	NS	?E	S		
<i>Arthopyrenia</i>	<i>cerasi</i> [F]	NT		LC	NS				
<i>Arthopyrenia</i>	<i>cinereopruinosa</i> [F]	LC		LC					
<i>Arthopyrenia</i>	<i>fraxini</i> [F]	LC		LC	NS				
<i>Arthopyrenia</i>	<i>nitescens</i>	LC		LC	NS	?E	S		
<i>Arthopyrenia</i>	<i>punctiformis</i> [F]	LC		LC					
<i>Arthopyrenia</i>	<i>salicis</i>	LC		LC					
<i>Arthopyrenia</i>	<i>saxicola</i>	LC		LC	NS				
<i>Arthothelium</i>	<i>ruanum</i>	LC		LC	NS				
<i>Arthothelium</i>	<i>spectabile</i>	EX		EX				100	
<i>Arthrorhaphis</i>	<i>citrinella</i>	LC		LC					
<i>Aspicilia</i>	<i>aquatica</i>	DD		DD	NR				
<i>Aspicilia</i>	<i>caesiocinerea</i>	LC		LC					
<i>Aspicilia</i>	<i>calcareae</i>	LC		LC					

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Aspicilia</i>	<i>cinerea</i>	LC		LC					
<i>Aspicilia</i>	<i>contorta</i> ssp. <i>contorta</i>	LC		LC					
<i>Aspicilia</i>	<i>epiglypta</i>	LC		LC	NS				
<i>Aspicilia</i>	<i>grisea</i>	LC		LC					
<i>Aspicilia</i>	<i>intermutans</i>	DD		DD	NR		S	67	
<i>Aspicilia</i>	<i>laevata</i>	LC		LC	NS				
<i>Aspicilia</i>	<i>leproscens</i>	LC		LC					
<i>Aspicilia</i>	<i>radiosa</i>	LC		LC					
<i>Aspicilia</i>	<i>recedens</i>	DD		DD	NR		S	67	
<i>Aspicilia</i>	<i>subdepressa</i>	DD		DD	NR				
<i>Atla</i>	<i>wheldonii</i>	NT		NT	NS	E	S		
<i>Bacidia</i>	<i>absistens</i>	VU	D1	LC					
<i>Bacidia</i>	<i>adastra</i>	LC		LC	NR		W		
<i>Bacidia</i>	<i>arceutina</i>	LC		LC					
<i>Bacidia</i>	<i>arnoldiana</i>	LC		LC					
<i>Bacidia</i>	<i>bagliettoana</i>	LC		LC					
<i>Bacidia</i>	<i>biatorina</i>	NT		LC					
<i>Bacidia</i>	<i>caligans</i>	LC		LC	NS				
<i>Bacidia</i>	<i>carneoglauca</i>	LC		LC	NS		S		
<i>Bacidia</i>	<i>chlorotricula</i>	LC		LC	NS				
<i>Bacidia</i>	<i>circumspecta</i>	VU	D1	VU	NS			25	P*
<i>Bacidia</i>	<i>delicata</i>	LC		LC					
<i>Bacidia</i>	<i>egenula</i>	LC		LC	NS				
<i>Bacidia</i>	<i>friesiana</i>	VU ?	D2	LC	NS				
<i>Bacidia</i>	<i>fuscoviridis</i>	LC		LC	NS			66?	
<i>Bacidia</i>	<i>herbarum</i>	VU	D2	DD	NS				
<i>Bacidia</i>	<i>incompta</i>	CR	A2	VU					P*
<i>Bacidia</i>	<i>inundata</i>	LC		LC					
<i>Bacidia</i>	<i>laurocerasi</i>	LC		LC					
<i>Bacidia</i>	<i>phacodes</i>	LC		LC					
<i>Bacidia</i>	<i>polychroa</i>	EX		EX					
<i>Bacidia</i>	<i>rubella</i>	LC		LC					
<i>Bacidia</i>	<i>saxenii</i>	LC		LC	NS				
<i>Bacidia</i>	<i>scopulicola</i>	LC		LC					
<i>Bacidia</i>	<i>squamellosa</i>	DD		LC	NS				
<i>Bacidia</i>	<i>subincompta</i>	RE		VU	NS		S		P
<i>Bacidia</i>	<i>trachona</i>	LC		LC	NS				
<i>Bacidia</i>	<i>viridescens</i>	LC		LC	NS				
<i>Bacidia</i>	<i>viridifarinsa</i>	LC		LC					
<i>Bactrospora</i>	<i>corticola</i>	NT		LC	NS				
<i>Baeomyces</i>	<i>carneus</i>	DD		DD	NR		S?		
<i>Baeomyces</i>	<i>placophyllus</i>	LC		LC					
<i>Baeomyces</i>	<i>rufus</i>	LC		LC					
<i>Belonia</i>	<i>incarnata</i>	NT		LC	NS				
<i>Belonia</i>	<i>nidarosiensis</i>	LC		LC					
<i>Belonia</i>	<i>russula</i>	VU	D2	LC	NS		S		
<i>Biatora</i>	<i>britannica</i>	DD		LC	NR		W		
<i>Biatora</i>	<i>chrysantha</i>	NT		LC	NS				
<i>Biatora</i>	<i>globulosa</i>	CR	D1	NT	NS		S		
<i>Biatora</i>	<i>vernalis</i>	NT		LC	NS				
<i>Biatoridium</i>	<i>delitescens</i>	CR	D1	VU	NR		S		

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Biatoridium</i>	<i>monasteriense</i>	CR	B1a,D	EN	NR		S		P*
<i>Bilimbia</i>	<i>lobulata</i>	LC		LC					
<i>Bilimbia</i>	<i>sabuletorum</i>	LC		LC					
<i>Blarneya</i>	<i>hibernica</i>	CR	B1a,D	NT	NR	IR	N		P*
<i>Botryolepraria</i>	<i>lesdainii</i>	LC		LC					
<i>Bryophagus</i>	<i>gloeocapsa</i>	LC		LC	NS				
<i>Bryoria</i>	<i>bicolor</i>	VU	C1	LC	NS				
<i>Bryoria</i>	<i>chalybeiformis</i>	VU	C1	LC	NS				
<i>Bryoria</i>	<i>fuscescens</i> var. <i>fuscescens</i>	VU	C1	LC					
<i>Bryoria</i>	<i>smithii</i>	RE?		CR	NR				P*
<i>Bryoria</i>	<i>subcana</i>	LC		LC					
<i>Buellia</i>	<i>aethalea</i>	LC		LC					
<i>Buellia</i>	<i>badia</i>	LC		LC	NS		W		
<i>Buellia</i>	<i>disciformis</i>	LC		LC					
<i>Buellia</i>	<i>erubescens</i>	NT		LC	NS				
<i>Buellia</i>	<i>griseovirens</i>	LC		LC					
<i>Buellia</i>	<i>hyperbolica</i>	EN	B1a,D	VU	NR			67	P*
<i>Buellia</i>	<i>leptocline</i>	LC		LC	NR				
<i>Buellia</i>	<i>leptoclinoides</i>	DD		LC	NR				
<i>Buellia</i>	<i>ocellata</i>	LC		LC					
<i>Buellia</i>	<i>pulverea</i>	LC		LC	NS				
<i>Buellia</i>	<i>schaereri</i>	LC		LC					
<i>Buellia</i>	<i>sequax</i>	LC		LC	NS			33	
<i>Buellia</i>	<i>spuria</i>	DD		DD	NR			100	
<i>Buellia</i>	<i>stellulata</i>	LC		LC	?NS				
<i>Buellia</i>	<i>subdisciformis</i>	LC		LC					
<i>Buellia</i>	<i>uberior</i>	DD		DD	NR				
<i>Bunodophoron</i>	<i>melanocarpum</i>	NT		LC					
<i>Byssoloma</i>	<i>marginatum</i>	LC		LC	NS				
<i>Byssoloma</i>	<i>subdiscordans</i>	EN	B1a,D	NT	NR		N		
<i>Calicium</i>	<i>adpersum</i>	CR	D1	CR	NR			33	P*
<i>Calicium</i>	<i>glaucellum</i>	LC		LC					
<i>Calicium</i>	<i>lenticulare</i>	LC		LC	NS	IR			
<i>Calicium</i>	<i>quercinum</i>	EX		EX					
<i>Calicium</i>	<i>salicinum</i>	LC		LC					
<i>Calicium</i>	<i>viride</i>	LC		LC					
<i>Caloplaca</i>	<i>alociza</i>	LC		LC	NS			42	
<i>Caloplaca</i>	<i>arcis</i>	DD		LC	NS				
<i>Caloplaca</i>	<i>arenaria</i>	LC		LC	NS				
<i>Caloplaca</i>	<i>arnoldii</i>	LC		LC	NS				
<i>Caloplaca</i>	<i>asserigena</i>	LC		LC	NS			29	
<i>Caloplaca</i>	<i>atroflava</i>	DD		CR	NR			50	P*
<i>Caloplaca</i>	<i>aurantia</i>	LC		LC					
<i>Caloplaca</i>	<i>britannica</i>	DD		DD	NR	?E			
<i>Caloplaca</i>	<i>ceracea</i>	LC		LC					
<i>Caloplaca</i>	<i>cerina</i> var. <i>cerina</i>	LC		LC					
<i>Caloplaca</i>	<i>cerina</i> var. <i>chloroleuca</i>	DD		LC	NS				
<i>Caloplaca</i>	<i>cerinella</i>	LC		LC					
<i>Caloplaca</i>	<i>cerinelloides</i>	DD		LC	NS				
<i>Caloplaca</i>	<i>chalybaea</i>	LC		LC	NS				
<i>Caloplaca</i>	<i>chlorina</i>	LC		LC					

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<i>Caloplaca</i>	<i>chrysodeta</i>	LC		LC					
<i>Caloplaca</i>	<i>cirrochroa</i>	LC		LC					
<i>Caloplaca</i>	<i>citrina</i>	LC		LC					
<i>Caloplaca</i>	<i>crenularia</i>	LC		LC					
<i>Caloplaca</i>	<i>crenulatella</i>	LC		LC					
<i>Caloplaca</i>	<i>dalmatica</i>	LC		LC					
<i>Caloplaca</i>	<i>decipiens</i>	LC		LC					
<i>Caloplaca</i>	<i>dichroa</i>	DD		DD	NR				
<i>Caloplaca</i>	<i>ferruginea</i>	DD		LC		IR			
<i>Caloplaca</i>	<i>flavescens</i>	LC		LC					
<i>Caloplaca</i>	<i>flavocitrina</i>	LC		LC					
<i>Caloplaca</i>	<i>flavorubescens</i>	CR	D1	EN	NS				P*
<i>Caloplaca</i>	<i>flavovirescens</i>	LC		LC					
<i>Caloplaca</i>	<i>granulosa</i>	NT		NT	NR				
<i>Caloplaca</i>	<i>herbidella</i>	VU	D2	VU	NR		43		P*
<i>Caloplaca</i>	<i>holocarpa</i>	LC		LC					
<i>Caloplaca</i>	<i>irrubescens</i>	DD		DD	NR		20		
<i>Caloplaca</i>	<i>lactea</i>	LC		LC					
<i>Caloplaca</i>	<i>littorea</i>	LC		LC	NS				
<i>Caloplaca</i>	<i>lucifuga</i>	VU	D1	VU	NR		42		P*
<i>Caloplaca</i>	<i>luteoalba</i>	CR	B2a	EN	NS				P* S8
<i>Caloplaca</i>	<i>marina</i>	LC		LC					
<i>Caloplaca</i>	<i>maritima</i>	LC		LC	NS		37		
<i>Caloplaca</i>	<i>microthallina</i>	LC		LC					
<i>Caloplaca</i>	<i>obliterans</i>	LC		LC	NS		S	38	
<i>Caloplaca</i>	<i>obscurella</i>	LC		LC					
<i>Caloplaca</i>	<i>ochracea</i>	LC		LC	NS				
<i>Caloplaca</i>	<i>phlogina</i>	DD		NE	?NS				
<i>Caloplaca</i>	<i>polycarpa</i>	DD		LC	NR				
<i>Caloplaca</i>	<i>runderum</i>	LC		LC					
<i>Caloplaca</i>	<i>saxicola</i>	LC		LC					
<i>Caloplaca</i>	<i>scopularis</i>	NT		NT	NS		S		
<i>Caloplaca</i>	<i>sorediella</i>	DD		DD	NR		25		
<i>Caloplaca</i>	<i>teicholyta</i>	LC		LC					
<i>Caloplaca</i>	<i>thallincola</i>	LC		LC					
<i>Caloplaca</i>	<i>ulcerosa</i>	LC		LC					
<i>Caloplaca</i>	<i>variabilis</i>	LC		LC					
<i>Caloplaca</i>	<i>verruculifera</i>	LC		LC					
<i>Caloplaca</i>	<i>vitellinula</i>	DD		NE	NR				
<i>Caloplaca</i>	<i>xantholyta</i>	LC		LC					
<i>Calvitimela</i>	<i>aglaea</i>	LC		LC	NS				
<i>Candelaria</i>	<i>concolor</i>	LC		LC					
<i>Candelariella</i>	<i>aurella</i> f. <i>aurella</i>	LC		LC					
<i>Candelariella</i>	<i>coralliza</i>	LC		LC					
<i>Candelariella</i>	<i>medians</i> f. <i>medians</i>	LC		LC					
<i>Candelariella</i>	<i>reflexa</i>	LC		LC					
<i>Candelariella</i>	<i>vitellina</i> f. <i>vitellina</i>	LC		LC					
<i>Candelariella</i>	<i>xanthostigma</i>	LC		LC					
<i>Carbonea</i>	<i>vorticosa</i>	DD		LC	NS		S		
<i>Catapyrenium</i>	<i>cinereum</i>	LC		LC	NS				
<i>Catapyrenium</i>	<i>psoromoides</i>	RE		CR	NR				P S8

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	National/international responsibility	Rarity	Edge of British range in Wales	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Catapyrenium</i>	<i>rufescens</i>	DD			DD	NR			25	
<i>Catillaria</i>	<i>aphana</i>	VU	D2		NT	NR				X
<i>Catillaria</i>	<i>atomarioides</i>	LC			LC	NS				
<i>Catillaria</i>	<i>chalybeia</i> var. <i>chalybeia</i>	LC			LC					
<i>Catillaria</i>	<i>chalybeia</i> var. <i>chloropoliza</i>	DD			NE	?				
<i>Catillaria</i>	<i>contristans</i>	VU	D1		LC	NS		S		
<i>Catillaria</i>	<i>lenticularis</i>	LC			LC					
<i>Catillaria</i>	<i>nigroclavata</i>	DD			LC	NS				
<i>Catillaria</i>	<i>scotinodes</i>	NT			LC	NS		S		
<i>Catillaria</i>	<i>subviridis</i>	DD			VU	NR		S		X
<i>Catinaria</i>	<i>atropurpurea</i>	NT			LC					
<i>Celothelium</i>	<i>ischnobelum</i>	LC			LC					
<i>Cetraria</i>	<i>aculeata</i>	LC			LC					
<i>Cetraria</i>	<i>ericetorum</i>	RE			LC	NS		S		
<i>Cetraria</i>	<i>islandica</i> ssp. <i>islandica</i>	NT			LC					
<i>Cetraria</i>	<i>muricata</i>	LC			LC					
<i>Cetraria</i>	<i>sepincola</i>	VU	A2		LC			S		
<i>Cetrelia</i>	<i>olivetorum</i> s. lat.	NT			LC					
<i>Cetrariella</i>	<i>commixta</i>	NT			LC	NS		S		
<i>Chaenotheca</i>	<i>brachypoda</i>	VU	D1		LC	NS				
<i>Chaenotheca</i>	<i>brunneola</i>	LC			LC					
<i>Chaenotheca</i>	<i>chlorella</i>	EN	D		NT	NS				
<i>Chaenotheca</i>	<i>chrysocephala</i>	LC			LC					
<i>Chaenotheca</i>	<i>ferruginea</i>	LC			LC					
<i>Chaenotheca</i>	<i>furfuracea</i>	LC			LC					
<i>Chaenotheca</i>	<i>hispidula</i>	LC			LC	NS				
<i>Chaenotheca</i>	<i>phaeocephala</i>	EX?			CR	NR				P*
<i>Chaenotheca</i>	<i>stemonea</i>	VU	D1		LC	NS				
<i>Chaenotheca</i>	<i>trichialis</i>	LC			LC					
<i>Chaenothecopsis</i>	<i>nigra</i>	LC			LC	NS				
<i>Chaenothecopsis</i>	<i>savonica</i>	VU	D2		NT	NR				
<i>Chrysothrix</i>	<i>candelaris</i>	LC			LC					
<i>Chrysothrix</i>	<i>chlorina</i>	NT			LC	NS				
<i>Chrysothrix</i>	<i>flavovirens</i>	LC			LC					
<i>Cladonia</i>	<i>alpina</i>	LC			DD	NR			100	
<i>Cladonia</i>	<i>arbuscula</i> ssp. <i>squarrosa</i>	LC			LC					
<i>Cladonia</i>	<i>azorica</i>	LC			LC	NS			73	
<i>Cladonia</i>	<i>bellidiflora</i>	LC			LC					
<i>Cladonia</i>	<i>borealis</i>	DD			DD	NR		S		
<i>Cladonia</i>	<i>caespiticia</i>	LC			LC					
<i>Cladonia</i>	<i>callosa</i>	DD			LC	NS				
<i>Cladonia</i>	<i>cariosa</i>	DD			LC	NS				
<i>Cladonia</i>	<i>cervicornis</i> ssp. <i>cervicornis</i>	LC			LC					
<i>Cladonia</i>	<i>cervicornis</i> ssp. <i>verticillata</i>	LC			LC					
<i>Cladonia</i>	<i>chlorophaea</i> s. lat.	LC			LC					
<i>Cladonia</i>	<i>ciliata</i> var. <i>ciliata</i>	LC			LC					
<i>Cladonia</i>	<i>ciliata</i> var. <i>tenuis</i>	LC			LC					
<i>Cladonia</i>	<i>coniocraea</i>	LC			LC					
<i>Cladonia</i>	<i>cornuta</i>	LC			LC					
<i>Cladonia</i>	<i>crispata</i> var. <i>cetrariiformis</i>	LC			LC					
<i>Cladonia</i>	<i>crispata</i> var. <i>crispata</i>	DD			NE	NR		S		

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<i>Cladonia</i>	<i>cyathomorpha</i>	LC		LC	NS				
<i>Cladonia</i>	<i>digitata</i>	LC		LC					
<i>Cladonia</i>	<i>diversa</i>	LC		LC					
<i>Cladonia</i>	<i>fimbriata</i>	LC		LC					
<i>Cladonia</i>	<i>firma</i>	LC		LC	NS				
<i>Cladonia</i>	<i>floerkeana</i>	LC		LC					
<i>Cladonia</i>	<i>foliacea</i>	LC		LC					
<i>Cladonia</i>	<i>furcata</i> ssp. <i>furcata</i>	LC		LC					
<i>Cladonia</i>	<i>furcata</i> ssp. <i>subrangiformis</i>	LC		LC					
<i>Cladonia</i>	<i>glauca</i>	LC		LC					
<i>Cladonia</i>	<i>gracilis</i>	LC		LC					
<i>Cladonia</i>	<i>humilis</i>	LC		LC					
<i>Cladonia</i>	<i>incrassata</i>	NT		LC	NS				
<i>Cladonia</i>	<i>luteoalba</i>	LC		LC					
<i>Cladonia</i>	<i>macilenta</i>	LC		LC					
<i>Cladonia</i>	<i>macrophylla</i>	VU	D2	LC	NS				
<i>Cladonia</i>	<i>mediterranea</i>	DD		CR	NR				P
<i>Cladonia</i>	<i>norvegica</i>	DD		DD	NR		50		
<i>Cladonia</i>	<i>ochrochlora</i>	LC		LC					
<i>Cladonia</i>	<i>parasitica</i>	LC		LC					
<i>Cladonia</i>	<i>peziziformis</i>	NT		CR	NR		67		P*
<i>Cladonia</i>	<i>pocillum</i>	LC		LC					
<i>Cladonia</i>	<i>polydactyla</i> var. <i>polydactyla</i>	LC		LC					
<i>Cladonia</i>	<i>portentosa</i>	LC		LC					
<i>Cladonia</i>	<i>pyxidata</i>	LC		LC					
<i>Cladonia</i>	<i>ramulosa</i>	LC		LC					
<i>Cladonia</i>	<i>rangiferina</i>	NT		LC		S			
<i>Cladonia</i>	<i>rangiformis</i>	LC		LC					
<i>Cladonia</i>	<i>scabriuscula</i>	LC		LC					
<i>Cladonia</i>	<i>squamosa</i> var. <i>squamosa</i>	LC		LC					
<i>Cladonia</i>	<i>squamosa</i> var. <i>subsquamosa</i>	LC		LC					
<i>Cladonia</i>	<i>strepsilis</i>	LC		LC					
<i>Cladonia</i>	<i>stygia</i>	VU	D2	DD	NR	S			
<i>Cladonia</i>	<i>subcervicornis</i>	LC		LC					
<i>Cladonia</i>	<i>subulata</i>	LC		LC					
<i>Cladonia</i>	<i>sulphurina</i>	VU	D2	LC		S			
<i>Cladonia</i>	<i>symphy carpia</i>	DD		LC	NS				
<i>Cladonia</i>	<i>uncialis</i> ssp. <i>biuncialis</i>	LC		LC					
<i>Cladonia</i>	<i>uncialis</i> ssp. <i>uncialis</i>	VU	D2	NT	NR				
<i>Clauroxia</i>	<i>chalybeoides</i>	LC		LC	NS				
<i>Clauzadia</i>	<i>condrodes</i>	DD		DD	NR		33		
<i>Clauzadea</i>	<i>immersa</i>	LC		LC					
<i>Clauzadea</i>	<i>metzleri</i>	LC		LC	NS				
<i>Clauzadea</i>	<i>monticola</i>	LC		LC					
<i>Clauzadeana</i>	<i>macula</i>	LC		LC	NS				
<i>Cliostomum</i>	<i>corrugatum</i>	DD		VU	NR				
<i>Cliostomum</i>	<i>griffithii</i>	LC		LC					
<i>Cliostomum</i>	<i>tenerum</i>	LC		LC					
<i>Coccotrema</i>	<i>citrinescens</i>	VU	D2	LC	NS	S			
<i>Collema</i>	<i>auriforme</i>	LC		LC					
<i>Collema</i>	<i>callopismum</i> var. <i>callopismum</i>	VU	D2	DD	NR				

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Collema</i>	<i>crispum</i> var. <i>crispum</i>			LC					
<i>Collema</i>	<i>cristatum</i> var. <i>cristatum</i>			LC					
<i>Collema</i>	<i>dichotomum</i>	EN	A4,B2b	VU	NS				P* S8
<i>Collema</i>	<i>fasciculare</i>	CR		NT	NS	IR	S		P*
<i>Collema</i>	<i>flaccidum</i>			LC					
<i>Collema</i>	<i>fragile</i>	NT		VU	NR			44	P*
<i>Collema</i>	<i>fragrans</i>	RE?		EN	NS	IR			*
<i>Collema</i>	<i>furfuraceum</i>	NT		LC					
<i>Collema</i>	<i>fuscovirens</i>			LC					
<i>Collema</i>	<i>glebulentum</i>	NT		LC	NS		S		
<i>Collema</i>	<i>limosum</i>			LC	NS				
<i>Collema</i>	<i>multipartitum</i>			LC	NS				
<i>Collema</i>	<i>nigrescens</i>	VU	D2	NT	NS				
<i>Collema</i>	<i>occultatum</i>	VU	D2	NT	NS				
<i>Collema</i>	<i>parvum</i>	VU	D2	VU	NR			20	
<i>Collema</i>	<i>polycarpon</i>			LC	NS				
<i>Collema</i>	<i>subflaccidum</i>			LC					
<i>Collema</i>	<i>subnigrescens</i>	CR	D1	DD	NR				
<i>Collema</i>	<i>tenax</i> var. <i>ceranoides</i>			LC					
<i>Collema</i>	<i>tenax</i> var. <i>corallinum</i>			LC	NE	?			
<i>Collema</i>	<i>tenax</i> var. <i>tenax</i>			LC					
<i>Collema</i>	<i>tenax</i> var. <i>vulgare</i>			LC					
<i>Collema</i>	<i>undulatum</i> var. <i>granulosum</i>	DD		DD	NR			25	
<i>Collema</i>	<i>undulatum</i> var. <i>undulatum</i>	DD		DD	NR		S		
<i>Collemopsidium</i>	<i>angermannicum</i>	NT		NT	NS			22	
<i>Collemopsidium</i>	<i>caesium</i>	DD		NT	NR		S	25	
<i>Collemopsidium</i>	<i>elegans</i>			LC	NS			39	
<i>Collemopsidium</i>	<i>foveolatum</i>			LC	?				
<i>Collemopsidium</i>	<i>halodytes</i>			LC					
<i>Collemopsidium</i>	<i>monense</i>			LC	NS				
<i>Collemopsidium</i>	<i>orustense</i>			LC	NS			27	
<i>Coppinsia</i>	<i>minutissima</i>			LC	NS			69	
<i>Cornicularia</i>	<i>normoerica</i>			LC					
<i>Cresponea</i>	<i>premnea</i> var. <i>premnea</i>	NT		LC		IR			
<i>Cresponea</i>	<i>premnea</i> var. <i>saxicola</i>	DD		NE	?				
<i>Cryptolechia</i>	<i>carneolutea</i>	VU	D2	EN	NS	IR			P
<i>Cryptothele</i>	<i>rhodosticta</i>	DD		DD	NR	IR		100	
<i>Cyphelium</i>	<i>inquinans</i>			LC					
<i>Cyrtidula</i>	<i>quercus</i> [F]			LC					
<i>Cystocoleus</i>	<i>ebeneus</i>			LC					
<i>Degelia</i>	<i>atlantica</i>	VU	A2,D1	LC		IR			
<i>Degelia</i>	<i>ligulata</i>	VU	D2	VU	NR	IR		40	
<i>Degelia</i>	<i>plumbea</i>	VU	A2,D1	LC		IR			
<i>Dermatocarpon</i>	<i>intestiniforme</i>			LC					
<i>Dermatocarpon</i>	<i>leptophyllodes</i>	NT		LC	NS			45	
<i>Dermatocarpon</i>	<i>luridum</i>			LC					
<i>Dermatocarpon</i>	<i>meiophyllizum</i>	NT		LC	NS			36	
<i>Dermatocarpon</i>	<i>miniatum</i> var. <i>miniatum</i>			LC					
<i>Dermatocarpon</i>	<i>rivulorum</i>	DD		DD	NR		S	33	
<i>Dibaëis</i>	<i>baeomyces</i>			LC					
<i>Dictyonema</i>	<i>interruptum</i>	RE		DD	NR				

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<i>Dimerella</i>	<i>lutea</i>	NT			LC				
<i>Dimerella</i>	<i>pineti</i>	LC			LC				
<i>Diploicia</i>	<i>canescens</i>	LC			LC				
<i>Diploschistes</i>	<i>caesioplumbeus</i>	LC			LC	NS			
<i>Diploschistes</i>	<i>gypsaceus</i>	NT			LC	NS			
<i>Diploschistes</i>	<i>muscorum</i>	LC			LC				
<i>Diploschistes</i>	<i>scruposus</i>	LC			LC				
<i>Diplotomma</i>	<i>alboatrum</i>	LC			LC				
<i>Diplotomma</i>	<i>chlorophaeum</i>	LC			LC				
<i>Dirina</i>	<i>massiliensis</i> f. <i>massiliensis</i>	VU	D2	NT	NS			33	
<i>Dirina</i>	<i>massiliensis</i> f. <i>sorediata</i>	LC			LC				
<i>Endocarpon</i>	<i>adscendens</i>	CR	D1	EN	NR			67	P*
<i>Endocarpon</i>	<i>pusillum</i>	EN	B1a,D	NT	NR				
<i>Enterographa</i>	<i>crassa</i>	LC			LC				
<i>Enterographa</i>	<i>hutchinsiae</i>	LC			LC				
<i>Eopyrenula</i>	<i>avellanae</i> [F]	DD			LC	NS	IR		
<i>Eopyrenula</i>	<i>grandicula</i> [F]	LC			LC	NS	IR		
<i>Ephebe</i>	<i>hispidula</i>	DD			NT	NR		42	
<i>Ephebe</i>	<i>lanata</i>	LC			LC				
<i>Eiglera</i>	<i>flavida</i>	DD			LC	NS	S		
<i>Epigloea</i>	<i>bactrospora</i>	DD			LC	NR	S	33	
<i>Epigloea</i>	<i>filifera</i>	DD			LC	NR		100	
<i>Epigloea</i>	<i>medioincrassata</i>	DD			LC	NR		57	
<i>Epigloea</i>	<i>soleiformis</i>	LC			LC	NS			
<i>Epiphloea</i>	<i>byssina</i>	DD			LC	NR			
<i>Euopsis</i>	<i>granatina</i>	DD			DD	NS			
<i>Evernia</i>	<i>prunastri</i>	LC			LC				
<i>Farnoldia</i>	<i>jurana</i>	LC			LC	NS			
<i>Fellhanera</i>	<i>bouteillei</i>	LC			LC	NS			
<i>Fellhanera</i>	<i>duplex</i>	DD			DD	NR		33	
<i>Fellhanera</i>	<i>ochracea</i>	DD			LC	NR			
<i>Fellhanera</i>	<i>subtilis</i>	LC			LC	NR			
<i>Fellhanera</i>	<i>viridisorediata</i>	DD			DD	NR		25	
<i>Fellhaneropsis</i>	<i>myrtillicola</i>	LC			LC	NR		56	
<i>Fellhaneropsis</i>	<i>vezdae</i>	LC			LC				
<i>Flavoparmelia</i>	<i>caperata</i>	LC			LC				
<i>Flavoparmelia</i>	<i>soredians</i>	LC			LC				
<i>Frutidella</i>	<i>caesioatra</i>	VU	D2	LC	NS		S		
<i>Fulgensia</i>	<i>fulgens</i>	EN	D	EN	NR			33	P*
<i>Fuscidea</i>	<i>austera</i>	DD			NT	NS	S		
<i>Fuscidea</i>	<i>cyathoides</i> var. <i>cyathoides</i>	LC			LC				
<i>Fuscidea</i>	<i>cyathoides</i> var. <i>sorediata</i>	LC			NE	NR			
<i>Fuscidea</i>	<i>gothoburgensis</i>	LC			LC	NS			
<i>Fuscidea</i>	<i>intercincta</i>	NT			LC	NS	S		
<i>Fuscidea</i>	<i>kochiana</i>	LC			LC				
<i>Fuscidea</i>	<i>lightfootii</i>	LC			LC				
<i>Fuscidea</i>	<i>lygaea</i>	LC			LC				
<i>Fuscidea</i>	<i>mollis</i>	VU	D2	DD	NR		S	33	
<i>Fuscidea</i>	<i>praeruptorum</i>	LC			LC				
<i>Fuscidea</i>	<i>recensa</i>	LC			LC				
<i>Fuscopannaria</i>	<i>mediterranea</i>	VU	D1	LC	NS				

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	National/international rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Fuscopannaria</i>	<i>sampaiana</i>	EN	D1	NT	NS	IR			P*
<i>Gomphillus</i>	<i>calycioides</i>	EN	D1	NT	NS	IR	S		P*
<i>Graphina</i>	<i>anguina</i>	LC		LC					
<i>Graphina</i>	<i>pauciloculata</i>	EN	D	VU	NR	E		27	P*
<i>Graphina</i>	<i>ruiziana</i>	LC		LC	NS	IR			
<i>Graphis</i>	<i>elegans</i>	LC		LC					
<i>Graphis</i>	<i>scripta</i>	LC		LC					
<i>Gregorella</i>	<i>humida</i>	LC		LC	NR				
<i>Gyalecta</i>	<i>biformis</i>	VU	D2	DD	NR			43	
<i>Gyalecta</i>	<i>derivata</i>	LC		LC	NS				
<i>Gyalecta</i>	<i>flotowii</i>	LC		NT	NS				*
<i>Gyalecta</i>	<i>foveolaris</i>	EN	D	NT	NR		S		
<i>Gyalecta</i>	<i>jenensis</i> var. <i>jenensis</i>	LC		LC					
<i>Gyalecta</i>	<i>truncigena</i>	LC		LC					
<i>Gyalidea</i>	<i>fritzei</i>	EN	D	NT	NR		S		
<i>Gyalidea</i>	<i>lecideopsis</i>	EN	D	DD	NR			25	
<i>Gyalidea</i>	<i>subscutellaris</i>	NT		NT	NR			92	
<i>Gyalideopsis</i>	<i>crenulata</i>	DD		DD	NR	E		100	
<i>Gyalideopsis</i>	<i>musciola</i>	LC		LC	NS	IR			
<i>Haematomma</i>	<i>ochroleucum</i> var. <i>ochroleucum</i>	LC		LC					
<i>Haematomma</i>	<i>ochroleucum</i> var. <i>porphyrium</i>	LC		LC					
<i>Halecania</i>	<i>ralfsii</i>	LC		LC	NS				
<i>Halecania</i>	<i>spodomela</i>	NT		LC	NR				
<i>Halecania</i>	<i>viridescens</i>	LC		LC	NS				
<i>Herteliana</i>	<i>gagei</i>	LC		LC	NS				
<i>Heterodermia</i>	<i>japonica</i>	VU	D2	NT	NS				X
<i>Heterodermia</i>	<i>leucomela</i>	VU	D2	EN	NR	IR	N		P* S8
<i>Hymenelia</i>	<i>epulotica</i>	NT		LC	NS				
<i>Hymenelia</i>	<i>heteromorpha</i>	VU	D2	VU	NR		S		
<i>Hymenelia</i>	<i>prevostii</i>	LC		LC	NS				
<i>Hyperphyscia</i>	<i>adglutinata</i>	LC		LC					
<i>Hypocenomyce</i>	<i>caradocensis</i>	LC		LC					
<i>Hypocenomyce</i>	<i>friesii</i>	NT		LC	NS		S		
<i>Hypocenomyce</i>	<i>scalaris</i>	LC		LC					
<i>Hypogymnia</i>	<i>physodes</i>	LC		LC					
<i>Hypogymnia</i>	<i>tubulosa</i>	LC		LC					
<i>Hypotrachyna</i>	<i>afrorevoluta</i>	DD		NE	NR				
<i>Hypotrachyna</i>	<i>britannica</i>	LC		LC					
<i>Hypotrachyna</i>	<i>endochlora</i>	LC		LC	NS	IR			
<i>Hypotrachyna</i>	<i>laevigata</i>	LC		LC					
<i>Hypotrachyna</i>	<i>revoluta</i>	LC		LC					
<i>Hypotrachyna</i>	<i>sinuosa</i>	NT		LC		IR			
<i>Hypotrachyna</i>	<i>taylorensis</i>	NT		LC		IR			
<i>Icmadophila</i>	<i>ericetorum</i>	LC		LC					
<i>Immersaria</i>	<i>athrocarpa</i>	LC		LC	NS				
<i>Imshaugia</i>	<i>aleurites</i>	LC		LC					
<i>Ionaspis</i>	<i>lacustris</i>	LC		LC					
<i>Ionaspis</i>	<i>odora</i>	VU	D2	LC	NS		S		
<i>Ionaspis</i>	<i>suaveolens</i>	VU	D2	DD	NR		S		
<i>Jamesiella</i>	<i>anastomosans</i>	LC		LC					
<i>Jamesiella</i>	<i>scotica</i>	DD		NT	NS	E	S		P

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<i>Japewiella</i>	<i>tavaresiana</i>			LC		LC						
<i>Koerberiella</i>	<i>wimmeriana</i>	VU		D2		LC	NS		S			
<i>Lasallia</i>	<i>pustulata</i>			LC		LC						
<i>Lecanactis</i>	<i>abietina</i>			LC		LC						
<i>Lecanactis</i>	<i>dilleniana</i>			LC		LC	NS			46		
<i>Lecanactis</i>	<i>latebrarum</i>	NT				LC	NR					
<i>Lecanactis</i>	<i>subabietina</i>			LC		LC		IR				
<i>Lecania</i>	<i>aipospila</i>			LC		LC	NS					
<i>Lecania</i>	<i>atrynoides</i>			LC		LC	NS					
<i>Lecania</i>	<i>baeomma</i>			LC		LC	NS					
<i>Lecania</i>	<i>chlorotiza</i>	NT				NT	NS	IR		P*		
<i>Lecania</i>	<i>cuprea</i>			LC		LC	NS					
<i>Lecania</i>	<i>cyrtella</i>			LC		LC						
<i>Lecania</i>	<i>cyrtellina</i>			LC		LC	NS					
<i>Lecania</i>	<i>erysibe</i>			LC		LC						
<i>Lecania</i>	<i>fructigena</i>	DD				LC	NR					
<i>Lecania</i>	<i>hutchinsiae</i>			LC		LC						
<i>Lecania</i>	<i>naegelii</i>			LC		LC						
<i>Lecania</i>	<i>nylanderiana</i>	DD				DD	NR			33		
<i>Lecania</i>	<i>rabenhorstii</i>			LC		LC	NS					
<i>Lecania</i>	<i>suavis</i>	DD				DD	NR			38		
<i>Lecania</i>	<i>sylvestris</i>	DD				LC	NS					
<i>Lecania</i>	<i>turicensis</i>			LC		LC						
<i>Lecanographa</i>	<i>amylacea</i>	EN		D		VU	NS	IR		P*		
<i>Lecanographa</i>	<i>lyncea</i>	EN		D		LC		IR				
<i>Lecanora</i>	<i>achariana</i>	EN		D		CR	NR		S	40	P*	S8
<i>Lecanora</i>	<i>actophila</i>			LC		LC						
<i>Lecanora</i>	<i>agardhiana</i>			LC		DD	NR					
<i>Lecanora</i>	<i>aitema</i> var. <i>aitema</i>			LC		LC						
<i>Lecanora</i>	<i>albellula</i>			LC		LC	NS					
<i>Lecanora</i>	<i>albescens</i>			LC		LC						
<i>Lecanora</i>	<i>alboflavida</i>			LC		LC						
<i>Lecanora</i>	<i>andrewii</i>			LC		LC	NS					
<i>Lecanora</i>	<i>argentata</i>			LC		LC	NS					
<i>Lecanora</i>	<i>barkmanniana</i>	DD				LC	NS					
<i>Lecanora</i>	<i>caesiosora</i>	DD				LC	NS		S			
<i>Lecanora</i>	<i>campestris</i> ssp. <i>campestris</i>			LC		LC						
<i>Lecanora</i>	<i>carpinea</i>			LC		LC						
<i>Lecanora</i>	<i>cenisia</i> var. <i>cenisia</i>	VU		D2		LC	NR		S		38	
<i>Lecanora</i>	<i>chlarotera</i>			LC		LC						
<i>Lecanora</i>	<i>compallens</i>	DD				LC	NS					
<i>Lecanora</i>	<i>conferta</i>			LC		LC						
<i>Lecanora</i>	<i>confusa</i>			LC		LC						
<i>Lecanora</i>	<i>conizaeoides</i> f. <i>conizaeoides</i>			LC		LC						
<i>Lecanora</i>	<i>conizaeoides</i> f. <i>variola</i>	DD				NE	?					
<i>Lecanora</i>	<i>crenulata</i>			LC		LC						
<i>Lecanora</i>	<i>dispersa</i>			LC		LC						
<i>Lecanora</i>	<i>epanora</i>			LC		L						
<i>Lecanora</i>	<i>expallens</i>			LC		LC						
<i>Lecanora</i>	<i>fugiens</i>			LC		LC						
<i>Lecanora</i>	<i>gangaleoides</i>			LC		LC						

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	National/international rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Lecanora</i>	<i>gisleriana</i>	VU		D2	DD	NR		60	
<i>Lecanora</i>	<i>hagenii</i>	LC			NE				
<i>Lecanora</i>	<i>handelii</i>	NT			NT	NS		37	
<i>Lecanora</i>	<i>helicopis</i>	LC			LC				
<i>Lecanora</i>	<i>horiza</i>	VU		D2	NT	NS			
<i>Lecanora</i>	<i>intricata</i>	LC			LC				
<i>Lecanora</i>	<i>intumescens</i>	LC			LC				
<i>Lecanora</i>	<i>jamesii</i>	LC			LC				
<i>Lecanora</i>	<i>muralis</i>	LC			LC				
<i>Lecanora</i>	<i>ochroidea</i>	LC			DD	NR	N	50	
<i>Lecanora</i>	<i>orosthea</i>	LC			LC				
<i>Lecanora</i>	<i>persimilis</i>	DD			LC	NS			
<i>Lecanora</i>	<i>poliophaea</i>	LC			LC				
<i>Lecanora</i>	<i>polytropa</i>	LC			LC				
<i>Lecanora</i>	<i>praepostera</i>	LC			LC	NS			
<i>Lecanora</i>	<i>pulicaris</i>	LC			LC				
<i>Lecanora</i>	<i>quercicola</i>	VU		D2	VU	NS	IR	22	P*
<i>Lecanora</i>	<i>rugosella</i>	DD			DD	NR		25	
<i>Lecanora</i>	<i>rupicola</i> var. <i>efflorens</i>	DD			LC	NS	S		
<i>Lecanora</i>	<i>rupicola</i> var. <i>rupicola</i>	LC			LC				
<i>Lecanora</i>	<i>saligna</i>	LC			LC				
<i>Lecanora</i>	<i>sambuci</i>	LC			LC	NS			
<i>Lecanora</i>	<i>semipallida</i>	LC			LC	NS		46	
<i>Lecanora</i>	<i>soralifera</i>	LC			LC				
<i>Lecanora</i>	<i>stenotropia</i>	LC			LC				
<i>Lecanora</i>	<i>strobilina</i>	VU		D2	VU	NR		83	
<i>Lecanora</i>	<i>subaurea</i>	NT			LC	NS			
<i>Lecanora</i>	<i>subcarnea</i>	LC			LC	NS			
<i>Lecanora</i>	<i>sublivescens</i>	NT			NT	NS	IR	30	P*
<i>Lecanora</i>	<i>sulphurea</i>	LC			LC				
<i>Lecanora</i>	<i>symmicta</i>	LC			LC				
<i>Lecanora</i>	<i>varia</i>	LC			LC				
<i>Lecanora</i>	<i>zosteri</i>	DD			LC	NS			
<i>Lecidea</i>	<i>ahlesii</i>	LC			LC	NS		26	
<i>Lecidea</i>	<i>auriculata</i>	DD			LC	NS			
<i>Lecidea</i>	<i>berengeriana</i>	VU		D2	DD	NS	S		
<i>Lecidea</i>	<i>commaculans</i>	RE			DD	NR			
<i>Lecidea</i>	<i>confluens</i>	LC			LC	NS			
<i>Lecidea</i>	<i>diducens</i>	LC			LC	NS			
<i>Lecidea</i>	<i>doliiformis</i>	LC			LC	NS			
<i>Lecidea</i>	<i>endomelaena</i>	NT			DD	NR	S	67	
<i>Lecidea</i>	<i>erythrophaea</i>	DD			VU	NR			
<i>Lecidea</i>	<i>fuliginosa</i>	LC			LC	NS		41	
<i>Lecidea</i>	<i>fuscoatra</i>	LC			LC				
<i>Lecidea</i>	<i>hypnorum</i>	VU		D2	DD	?NS			
<i>Lecidea</i>	<i>hypopta</i>	LC			LC	NS			
<i>Lecidea</i>	<i>lactea</i>	LC			LC				
<i>Lecidea</i>	<i>lapicida</i>	LC			LC				
<i>Lecidea</i>	<i>lithophila</i>	LC			LC				
<i>Lecidea</i>	<i>phaeops</i>	LC			LC				
<i>Lecidea</i>	<i>plana</i>	LC			LC	NS			

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<i>Lecidea</i>	<i>promixta</i>	LC			DD	NR		S	40
<i>Lecidea</i>	<i>sanguineoatra</i>	LC			LC	NS			
<i>Lecidea</i>	<i>silacea</i>	VU	D2	LC	NS		S		
<i>Lecidea</i>	<i>swartzioidea</i>	LC		LC	NS		S	47	
<i>Lecidea</i>	<i>turgidula</i>	LC		LC					
<i>Lecidella</i>	<i>anomaloidea</i>	DD		LC	NS				
<i>Lecidella</i>	<i>asema</i>	LC		LC					
<i>Lecidella</i>	<i>carpathica</i>	LC		LC					
<i>Lecidella</i>	<i>elaeochroma</i> f. <i>soralifera</i>	LC		LC					
<i>Lecidella</i>	<i>elaeochroma</i> f. <i>elaeochroma</i>	LC		LC					
<i>Lecidella</i>	<i>meiococca</i>	LC		LC	NS				
<i>Lecidella</i>	<i>scabra</i>	LC		LC					
<i>Lecidella</i>	<i>stigmatea</i>	LC		LC					
<i>Lecidella</i>	<i>viridans</i>	DD		DD	NR				
<i>Lecidoma</i>	<i>demissum</i>	LC		LC	NS		S		
<i>Lemmopsis</i>	<i>arnoldiana</i>	VU	D2	NT	NR			25	
<i>Lempholemma</i>	<i>botryosum</i>	VU	D2	LC	NS				
<i>Lempholemma</i>	<i>cladodes</i>	VU	D2	NT	NR		S		
<i>Lempholemma</i>	<i>intricatum</i>	VU	D2	NT	NR		S		
<i>Lempholemma</i>	<i>polyanthes</i>	LC		LC	NS				
<i>Lempholemma</i>	<i>radiatum</i>	VU	D2	NT	NR		S		
<i>Lepraria</i>	<i>atlantica</i>	LC		LC	NS				
<i>Lepraria</i>	<i>bergensis</i>	DD		DD	NR				
<i>Lepraria</i>	<i>borealis</i>	LC		NE					
<i>Lepraria</i>	<i>caesioalba</i>	LC		LC					
<i>Lepraria</i>	<i>crassissima</i>	LC		LC	NR				
<i>Lepraria</i>	<i>diffusa</i> var. <i>chrysodetoides</i>	LC		LC	NR				
<i>Lepraria</i>	<i>diffusa</i> var. <i>diffusum</i>	LC		LC	NS				
<i>Lepraria</i>	<i>eburnea</i>	LC		LC	NS				
<i>Lepraria</i>	<i>ecorticata</i>	LC		LC	NS				
<i>Lepraria</i>	<i>elobata</i>	LC		LC	NS				
<i>Lepraria</i>	<i>humida</i>	LC		LC	?NR				
<i>Lepraria</i>	<i>incana</i>	LC		LC					
<i>Lepraria</i>	<i>jackii</i>	LC		LC					
<i>Lepraria</i>	<i>lobificans</i>	LC		LC					
<i>Lepraria</i>	<i>membranacea</i>	LC		LC					
<i>Lepraria</i>	<i>nivalis</i>	LC		LC	NS				
<i>Lepraria</i>	<i>nylanderiana</i>	DD		DD	NR			100	
<i>Lepraria</i>	<i>rigidula</i>	LC		LC					
<i>Lepraria</i>	<i>sylvicola</i>	LC		LC	NS				
<i>Lepraria</i>	<i>umbricola</i>	LC		LC	NS				
<i>Lepraria</i>	<i>vouauxii</i>	LC		LC					
<i>Leprocaulon</i>	<i>microscopicum</i>	LC		LC					
<i>Leptogium</i>	<i>biatorinum</i>	DD		LC	NS				
<i>Leptogium</i>	<i>brebissonii</i>	VU	D2	NT	NS	IR			p*
<i>Leptogium</i>	<i>britannicum</i>	NT		LC	NS	IR			
<i>Leptogium</i>	<i>burgessii</i>	VU	D2	LC		IR			
<i>Leptogium</i>	<i>cochleatum</i>	CR	D	VU	NS	IR			p*
<i>Leptogium</i>	<i>cyanescens</i>	NT		LC		IR			
<i>Leptogium</i>	<i>diffractum</i>	NT		NT	NS			36	
<i>Leptogium</i>	<i>gelatinosum</i>	LC		LC					

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Leptogium</i>	<i>intermedium</i>	LC		LC	NS			47	
<i>Leptogium</i>	<i>lichenoides</i>	LC		LC					
<i>Leptogium</i>	<i>massiliense</i>	VU	D2	NT	NR				
<i>Leptogium</i>	<i>palmatum</i>	LC		NT	NS			49	
<i>Leptogium</i>	<i>plicatile</i>	LC		LC					
<i>Leptogium</i>	<i>schraderi</i>	LC		LC					
<i>Leptogium</i>	<i>subtile</i>	LC		LC	NS			43	
<i>Leptogium</i>	<i>subtorulosum</i>	EN	D	NT	NR		S	25	
<i>Leptogium</i>	<i>tenuissimum</i>	VU	D2	LC	NS				
<i>Leptogium</i>	<i>teretiusculum</i>	LC		LC					
<i>Leptogium</i>	<i>turgidum</i>	LC		LC					
<i>Leptorhaphis</i>	<i>atomaria</i> [F]	VU	D2	LC	NS		S		
<i>Leptorhaphis</i>	<i>epidermis</i> [F]	LC		LC					
<i>Leptorhaphis</i>	<i>maggiana</i> [F]	DD		LC	NS				
<i>Lichenomphalia</i>	<i>alpina</i>	LC		LC					
<i>Lichenomphalia</i>	<i>hudsoniana</i>	LC		LC					
<i>Lichenomphalia</i>	<i>umbellifera</i>	LC		LC					
<i>Lichenomphalia</i>	<i>velutina</i>	LC		LC	?			50	
<i>Lichina</i>	<i>confinis</i>	LC		LC					
<i>Lichina</i>	<i>pygmaea</i>	LC		LC					
<i>Lithographa</i>	<i>tesserata</i>	LC		LC	NS			31	
<i>Llimonaea</i>	<i>sorediata</i>	LC		LC					
<i>Lobaria</i>	<i>amplissima</i>	VU	A4, D2	LC			IR		
<i>Lobaria</i>	<i>pulmonaria</i>	VU	A4	LC			IR		
<i>Lobaria</i>	<i>scrobiculata</i>	CR	A4, D	LC			IR		
<i>Lobaria</i>	<i>virens</i>	EN	A4, D	LC			IR		
<i>Lopadium</i>	<i>disciforme</i>	LC		LC					
<i>Loxospora</i>	<i>elatina</i>	LC		LC					
<i>Massalongia</i>	<i>carnosa</i>	LC		LC					
<i>Megalaria</i>	<i>grossa</i>	NT		LC					
<i>Megalaria</i>	<i>pulverea</i>	LC		LC					
<i>Megalospora</i>	<i>tuberculosa</i>	VU	D2	NT	NS		IR		p*
<i>Megaspora</i>	<i>verrucosa</i>	VU	D2	NT	NS				
<i>Melanelia</i>	<i>disjuncta</i>	NT		LC	NS				
<i>Melanelia</i>	<i>hepatizon</i>	VU	D2	LC	NS				
<i>Melanelia</i>	<i>stygia</i>	CR	D	NT	NS		S		
<i>Melanelixa</i>	<i>fuliginosa</i> ssp. <i>fuliginosa</i>	LC		LC					
<i>Melanelixa</i>	<i>fuliginosa</i> ssp. <i>glabrata</i>	LC		LC					
<i>Melanelixa</i>	<i>subaurifera</i>	LC		LC					
<i>Melanohalea</i>	<i>elegantula</i>	LC		LC					
<i>Melanohalea</i>	<i>exasperata</i>	LC		LC					
<i>Melanohalea</i>	<i>exasperatula</i>	LC		LC					
<i>Melanohalea</i>	<i>laciniatula</i>	LC		LC					
<i>Melaspilea</i>	<i>amota</i> [F]	DD		NT	NR		N	25	
<i>Melaspilea</i>	<i>atroides</i> [F]	LC		LC	NS		S		
<i>Melaspilea</i>	<i>granitophila</i>	LC		LC	NS		S	31	
<i>Melaspilea</i>	<i>interjecta</i>	DD		DD	NR	IR	S	60	
<i>Melaspilea</i>	<i>lentiginosa</i> [LF]	NE		NT	NR	IR			p*
<i>Melaspilea</i>	<i>ochrothalamia</i> [F]	LC		LC	NS				
<i>Menegazzia</i>	<i>subs similis</i>	RE		DD	NS	IR			
<i>Menegazzia</i>	<i>terebrata</i>	VU	C2ai	LC			IR		

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<i>Merismatium</i>	<i>deminutum</i>	LC			LC	NS			
<i>Micarea</i>	<i>adnata</i>	LC			LC	NS			
<i>Micarea</i>	<i>alabastrites</i>	LC			LC		IR		
<i>Micarea</i>	<i>bauschiana</i>	LC			LC				
<i>Micarea</i>	<i>botryoides</i>	LC			LC				
<i>Micarea</i>	<i>cinerea</i>	LC			LC				
<i>Micarea</i>	<i>coppinsii</i>	LC			LC	NS		29	
<i>Micarea</i>	<i>deminuta</i>	DD			LC	NR			
<i>Micarea</i>	<i>denigrata</i>	LC			LC				
<i>Micarea</i>	<i>erratica</i>	LC			LC				
<i>Micarea</i>	<i>farinosa</i>	DD			DD	?E	E	40	
<i>Micarea</i>	<i>globulosella</i>	DD			DD	NR		50	
<i>Micarea</i>	<i>hedlundii</i>	NT			NT	NR	S		
<i>Micarea</i>	<i>leprosula</i>	LC			LC				
<i>Micarea</i>	<i>lignaria</i> var. <i>endoleuca</i>	DD			LC	NS	IR		
<i>Micarea</i>	<i>lignaria</i> var. <i>lignaria</i>	LC			LC				
<i>Micarea</i>	<i>lithinella</i>	LC			LC	NS			
<i>Micarea</i>	<i>lutulata</i>	LC			LC				
<i>Micarea</i>	<i>marginata</i>	VU	D2		LC	NR	S		
<i>Micarea</i>	<i>melaena</i>	LC			LC				
<i>Micarea</i>	<i>micrococca</i>	LC			LC				
<i>Micarea</i>	<i>misella</i>	LC			LC	NS			
<i>Micarea</i>	<i>myriocarpa</i>	LC			LC	NS			
<i>Micarea</i>	<i>nitschkeana</i>	LC			LC				
<i>Micarea</i>	<i>peliocharpa</i>	LC			LC				
<i>Micarea</i>	<i>prasina</i> s. str.	LC			LC	NS			
<i>Micarea</i>	<i>pseudomarginata</i>	VU	D2		LC	NR	E		
<i>Micarea</i>	<i>pycniophora</i>	NT			NT	NS	IR		
<i>Micarea</i>	<i>stipitata</i>	LC			LC	NS	IR		
<i>Micarea</i>	<i>submilliaria</i>	VU	D2		DD	NR	S	25	
<i>Micarea</i>	<i>subnigrata</i>	LC			LC	NS			
<i>Micarea</i>	<i>subviridescens</i>	LC			LC	NR		25	
<i>Micarea</i>	<i>sylvicola</i>	LC			LC				
<i>Micarea</i>	<i>synotheoides</i>	LC			LC	NS	IR		
<i>Micarea</i>	<i>ternaria</i>	DD			LC	NR	S		
<i>Micarea</i>	<i>tuberculata</i>	LC			LC	NS			
<i>Micarea</i>	<i>turfosa</i>	VU	D2		LC	NS	S		
<i>Micarea</i>	<i>viridileprosa</i>	LC			LC	NS		27	
<i>Micarea</i>	<i>xanthonica</i>	LC			LC	NS	IR		
<i>Microcalicium</i>	<i>ahlneri</i> [F]	VU	D2		LC	NS		33	
<i>Microcalicium</i>	<i>arenarium</i>	DD			LC	NR			
<i>Microcalicium</i>	<i>disseminatum</i> [F]	VU	D2		LC	NR			
<i>Miriquidica</i>	<i>atrolulva</i>	VU	D2		LC	NS	S		
<i>Miriquidica</i>	<i>complanata</i> f. <i>complanata</i>	RE			LC	NS	S		
<i>Miriquidica</i>	<i>leucophaea</i>	LC			LC				
<i>Miriquidica</i>	<i>lulensis</i>	VU	D2		NT	NR	S	27	
<i>Miriquidica</i>	<i>pycnocarpa</i> f. <i>pycnocarpa</i>	LC			LC	NS			
<i>Miriquidica</i>	<i>pycnocarpa</i> f. <i>sorediata</i>	LC			LC	NS	S	21	
<i>Moelleropsis</i>	<i>nebulosa</i>	NT			LC	NS			
<i>Mycobilimbia</i>	<i>epixanthoides</i>	NT			LC				
<i>Mycobilimbia</i>	<i>pilularis</i>	NT			LC				

A Lichen Red Data List for Wales

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<i>Mycoblastus</i>	<i>affinis</i>	VU		D2	LC	NS		S	35	
<i>Mycoblastus</i>	<i>caesius</i>	LC			LC					
<i>Mycoblastus</i>	<i>fucatus</i>	LC			LC					
<i>Mycoblastus</i>	<i>sanguinarius</i> f. <i>leprosus</i>	DD			NE	?				
<i>Mycoblastus</i>	<i>sanguinarius</i> f. <i>sanguinarius</i>	LC			LC					
<i>Mycoglaena</i>	<i>myricae</i> [F]	LC			LC	NS				
<i>Mycomicrothelia</i>	<i>atlantica</i> [F]	VU		D2	NT	NR		S	20	
<i>Mycomicrothelia</i>	<i>confusa</i> [F]	LC			LC					
<i>Mycoporum</i>	<i>antecellens</i> [F]	LC			LC					
<i>Myriospora</i>	<i>heppii</i>	LC			LC	NS				
<i>Nephroma</i>	<i>laevigatum</i>	NT			LC		IR			
<i>Nephroma</i>	<i>parile</i>	NT			LC					
<i>Nephroma</i>	<i>tangeriense</i>	DD			NT	NR	IR		27	
<i>Normandina</i>	<i>acroglypta</i>	VU		D2	LC	NS				
<i>Normandina</i>	<i>pulchella</i>	LC			LC					
<i>Ochrolechia</i>	<i>androgyna</i>	LC			LC					
<i>Ochrolechia</i>	<i>frigida</i> f. <i>frigida</i>	NT			LC			S		
<i>Ochrolechia</i>	<i>inaequatula</i>	DD			LC	NS		S		
<i>Ochrolechia</i>	<i>microstictoides</i>	LC			LC	NS				
<i>Ochrolechia</i>	<i>parella</i>	LC			LC					
<i>Ochrolechia</i>	<i>subviridis</i>	LC			LC					
<i>Ochrolechia</i>	<i>tartarea</i>	LC			LC					
<i>Ochrolechia</i>	<i>turneri</i>	LC			LC					
<i>Opegrapha</i>	<i>atra</i>	LC			LC					
<i>Opegrapha</i>	<i>calcareae</i>	LC			LC					
<i>Opegrapha</i>	<i>cesareensis</i>	LC			LC					
<i>Opegrapha</i>	<i>corticola</i>	LC			LC		IR			
<i>Opegrapha</i>	<i>dolomitica</i>	LC			LC	NS				
<i>Opegrapha</i>	<i>fumosa</i>	VU		D2	LC	NS	IR			X
<i>Opegrapha</i>	<i>gyrocarpa</i>	LC			LC					
<i>Opegrapha</i>	<i>herbarum</i>	LC			LC					
<i>Opegrapha</i>	<i>lithyrga</i>	LC			LC	NS				
<i>Opegrapha</i>	<i>mougeotii</i>	LC			LC	NS				
<i>Opegrapha</i>	<i>multipuncta</i>	LC			LC					
<i>Opegrapha</i>	<i>niveoatra</i>	LC			LC					
<i>Opegrapha</i>	<i>ochrocheila</i>	LC			LC					
<i>Opegrapha</i>	<i>paraxanthodes</i>	NT			NT	NR				P
<i>Opegrapha</i>	<i>prosodea</i>	VU		D2	NT	NS	IR	N		P*
<i>Opegrapha</i>	<i>rufescens</i>	LC			LC					
<i>Opegrapha</i>	<i>saxigena</i>	LC			LC	NS	IR			
<i>Opegrapha</i>	<i>sorediifera</i>	LC			LC					
<i>Opegrapha</i>	<i>varia</i>	LC			LC					
<i>Opegrapha</i>	<i>vermicellifera</i>	LC			LC					
<i>Opegrapha</i>	<i>viridis</i>	LC			DD	NS				
<i>Opegrapha</i>	<i>vulgata</i>	LC			LC					
<i>Opegrapha</i>	<i>xerica</i>	LC			LC	NS	IR?			
<i>Opegrapha</i>	<i>zonata</i>	LC			LC					
<i>Ophioparma</i>	<i>ventosa</i>	LC			LC					
<i>Orphniospora</i>	<i>moriopsis</i> var. <i>moriopsis</i>	VU		D2	LC	NS		S		
<i>Pachyphiale</i>	<i>carneola</i>	NT			LC					
<i>Pannaria</i>	<i>conoplea</i>	NT			LC		IR			

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<i>Pannaria</i>	<i>rubiginosa</i>	CR	D	LC			IR			
<i>Parmelia</i>	<i>discordans</i>	LC		LC						
<i>Parmelia</i>	<i>omphalodes</i>	LC		LC						
<i>Parmelia</i>	<i>saxatilis</i>	LC		LC						
<i>Parmelia</i>	<i>sulcata</i>	LC		LC						
<i>Parmeliella</i>	<i>parvula</i>	NT		LC			IR			
<i>Parmeliella</i>	<i>testacea</i>	CR	D	NT	NS		IR			P*
<i>Parmeliella</i>	<i>triptophylla</i>	NT		LC			IR			
<i>Parmelina</i>	<i>carporrhizans</i>	VU	D2	VU	NS			N	25	P*
<i>Parmelina</i>	<i>pastillifera</i>	LC		LC						
<i>Parmelina</i>	<i>tiliacea</i>	LC		LC						
<i>Parmelinopsis</i>	<i>horrescens</i>	NT		NT	NS		IR	N	49	*
<i>Parmelinopsis</i>	<i>minarum</i>	VU	D2	NT	NR			N		S8
<i>Parmeliopsis</i>	<i>ambigua</i>	LC		LC						
<i>Parmeliopsis</i>	<i>hyperopta</i>	LC		LC						
<i>Parmotrema</i>	<i>arnoldii</i>	DD		NT	NS					
<i>Parmotrema</i>	<i>crinitum</i>	NT		LC						
<i>Parmotrema</i>	<i>perlatum</i>	LC		LC						
<i>Parmotrema</i>	<i>reticulatum</i>	LC		LC						
<i>Parmotrema</i>	<i>robustum</i>	CR	D	CR	NR			N	75	P*
<i>Peltigera</i>	<i>britannica</i>	NT		LC	NS		IR	S		
<i>Peltigera</i>	<i>canina</i>	LC		LC						
<i>Peltigera</i>	<i>collina</i>	NT		LC			IR			
<i>Peltigera</i>	<i>degenii</i>	LC		LC	NS			S		
<i>Peltigera</i>	<i>didactyla</i>	LC		LC						
<i>Peltigera</i>	<i>elizabethae</i>	NT		NT	NR			S		
<i>Peltigera</i>	<i>horizontalis</i>	LC		LC						
<i>Peltigera</i>	<i>hymenina</i>	LC		LC						
<i>Peltigera</i>	<i>leucophlebia</i>	LC		LC						
<i>Peltigera</i>	<i>membranacea</i>	LC		LC						
<i>Peltigera</i>	<i>neckeri</i>	LC		LC	NS					
<i>Peltigera</i>	<i>polydactylon</i>	VU	D2	LC	NS					
<i>Peltigera</i>	<i>praetextata</i>	LC		LC						
<i>Peltigera</i>	<i>rufescens</i>	LC		LC						
<i>Peltigera</i>	<i>venosa</i>	CR	D	VU	NS			S		P*
<i>Pertusaria</i>	<i>albescens</i> var. <i>albescens</i>	LC		LC						
<i>Pertusaria</i>	<i>albescens</i> var. <i>corallina</i>	LC		LC						
<i>Pertusaria</i>	<i>amara</i> f. <i>amara</i>	LC		LC						
<i>Pertusaria</i>	<i>amarescens</i>	VU	D2	LC	NR					
<i>Pertusaria</i>	<i>aspergilla</i>	LC		LC						
<i>Pertusaria</i>	<i>chiodectonoides</i>	VU	D2	LC	NS					
<i>Pertusaria</i>	<i>coccodes</i>	LC		LC						
<i>Pertusaria</i>	<i>corallina</i>	LC		LC						
<i>Pertusaria</i>	<i>coronata</i>	NT		LC	NS					
<i>Pertusaria</i>	<i>dactylina</i>	VU	D2	LC	NS					
<i>Pertusaria</i>	<i>excludens</i>	LC		LC	NS			S		
<i>Pertusaria</i>	<i>flavicans</i>	LC		LC						
<i>Pertusaria</i>	<i>flavida</i>	LC		LC						
<i>Pertusaria</i>	<i>hemisphaerica</i>	LC		LC						
<i>Pertusaria</i>	<i>hymenea</i>	LC		LC						
<i>Pertusaria</i>	<i>lactea</i>	LC		LC						

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Pertusaria</i>	<i>lactescens</i>			LC		LC			
<i>Pertusaria</i>	<i>leioplaca</i>			LC		LC			
<i>Pertusaria</i>	<i>melanochlora</i>	EN	B1a,D	EN	NR			20	
<i>Pertusaria</i>	<i>monogona</i>	VU	D2	LC	NS				
<i>Pertusaria</i>	<i>multipuncta</i>	LC		LC					
<i>Pertusaria</i>	<i>ophthalmiza</i>	DD		LC	NS	IR			
<i>Pertusaria</i>	<i>pertusa</i>	LC		LC					
<i>Pertusaria</i>	<i>pseudocorallina</i>	LC		LC					
<i>Pertusaria</i>	<i>pupillaris</i>	LC		LC					
<i>Pertusaria</i>	<i>pustulata</i>	RE		VU	NR				
<i>Pertusaria</i>	<i>velata</i>	VU	D2	VU	NS		N		P*
<i>Peterjamesia</i>	<i>circumscripta</i>	LC		LC					
<i>Peterjamesia</i>	<i>sorediata</i>	DD		LC					
<i>Petractis</i>	<i>clausa</i>	LC		LC					
<i>Phaeographis</i>	<i>dendritica</i>	LC		LC					
<i>Phaeographis</i>	<i>inusta</i>	LC		LC	NS	IR	N	30	
<i>Phaeographis</i>	<i>lyellii</i>	VU	D2	NT	NS	IR			
<i>Phaeographis</i>	<i>smithii</i>	LC		LC					
<i>Phaeophyscia</i>	<i>nigricans</i>	LC		LC					
<i>Phaeophyscia</i>	<i>orbicularis</i>	LC		LC					
<i>Phaeophyscia</i>	<i>sciastra</i>	DD		LC	NS				
<i>Phlyctis</i>	<i>agelaea</i>	NT		NT	NS				
<i>Phlyctis</i>	<i>argena</i>	LC		LC					
<i>Phyllopsora</i>	<i>rosei</i>	NT		LC	NS	IR			
<i>Physcia</i>	<i>adscendens</i>	LC		LC					
<i>Physcia</i>	<i>aipolia</i>	LC		LC					
<i>Physcia</i>	<i>caesia</i>	LC		LC					
<i>Physcia</i>	<i>clementei</i>	VU	D2	NT	NS				
<i>Physcia</i>	<i>dubia</i>	LC		LC					
<i>Physcia</i>	<i>leptalea</i>	LC		LC					
<i>Physcia</i>	<i>stellaris</i>	LC		LC					
<i>Physcia</i>	<i>tenella</i> ssp. <i>marina</i>	DD		NE					
<i>Physcia</i>	<i>tenella</i> ssp. <i>tenella</i>	LC		LC					
<i>Physcia</i>	<i>tribacia</i>	LC		LC					
<i>Physcia</i>	<i>tribacioides</i>	CR	D	VU	NS				P* S8
<i>Physconia</i>	<i>distorta</i>	LC		LC					
<i>Physconia</i>	<i>enteroxantha</i>	LC		LC					
<i>Physconia</i>	<i>grisea</i>	LC		LC					
<i>Physconia</i>	<i>perisidiosa</i>	NT		LC					
<i>Piccolia</i>	<i>ochrophora</i>	LC		LC					
<i>Pilophorus</i>	<i>strumaticus</i>	LC		LC	NS				
<i>Placidiopsis</i>	<i>custnani</i>	NT		NT	NS				
<i>Placidium</i>	<i>lachneum</i>	LC		LC	NS				
<i>Placidium</i>	<i>pilosellum</i>	NT		NT	NS				
<i>Placidium</i>	<i>squamulosum</i>	LC		LC	NS				
<i>Placopsis</i>	<i>lambii</i>	LC		LC				37	
<i>Placynthisiella</i>	<i>dasaea</i>	LC		LC					
<i>Placynthisiella</i>	<i>hyporhoda</i>	VU	D2	LC	NR				
<i>Placynthisiella</i>	<i>icmalea</i>	LC		LC					
<i>Placynthisiella</i>	<i>oligotropha</i>	LC		LC	NS				
<i>Placynthisiella</i>	<i>uliginosa</i>	LC		LC					

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<i>Placynthium</i>	<i>anemoideum</i>		EX?		NE	NR			100	
<i>Placynthium</i>	<i>asperellum</i>		VU	D2	NT	NR		S		
<i>Placynthium</i>	<i>dolichoterum</i>		VU	D2	DD	NR		S	20	
<i>Placynthium</i>	<i>flabellusum</i>		VU	D2	LC	NS		S		
<i>Placynthium</i>	<i>garovaglioii</i>		NT		LC	NR				
<i>Placynthium</i>	<i>hungaricum</i>		DD		DD	NR			100?	
<i>Placynthium</i>	<i>nigrum</i>		LC		LC					
<i>Placynthium</i>	<i>pannariellum</i>		VU	D2	NT	NS		S		
<i>Placynthium</i>	<i>subradiatum</i>		LC		LC	NS			20	
<i>Placynthium</i>	<i>tantaleum</i>		RE		LC	NS				
<i>Placynthium</i>	<i>tremniacum</i>		DD		DD	NR			29	
<i>Platismatia</i>	<i>glauca</i>		LC		LC					
<i>Pleurosticta</i>	<i>acetabulum</i>		DD		LC			W		
<i>Poeltinula</i>	<i>cerebrina</i>		EX?		VU	NR				P
<i>Polyblastia</i>	<i>agraria</i>		LC		LC	NS	IR		40	
<i>Polyblastia</i>	<i>albida</i>		LC		LC	NS				
<i>Polyblastia</i>	<i>cruenta</i>		LC		LC					
<i>Polyblastia</i>	<i>cupularis</i>		LC		LC	NS				
<i>Polyblastia</i>	<i>dermatodes</i>		NT		LC	NS				
<i>Polyblastia</i>	<i>efflorescens</i>		VU	D2	NT	NR		S		
<i>Polyblastia</i>	<i>melaspora</i>		LC		LC	NS		S		
<i>Polyblastia</i>	<i>philaea</i>		DD		DD	NR		S	60	
<i>Polyblastia</i>	<i>quartzina</i>		VU	D2	DD	NR		S	50	
<i>Polyblastia</i>	<i>schaereriana</i>		LC		LC	NS				
<i>Polyblastia</i>	<i>terrestris</i>		VU	D2	NT	NR		S		
<i>Polychidium</i>	<i>musciicola</i>		NT		LC	NS				
<i>Polysporina</i>	<i>lapponica</i>		LC		LC	NS			42	
<i>Polysporina</i>	<i>simplex</i>		LC		LC					
<i>Porina</i>	<i>aenea</i>		LC		LC					
<i>Porina</i>	<i>ahlesiana</i>		NT		NT	NS			26	
<i>Porina</i>	<i>borreri</i> var. <i>borreri</i>		LC		LC	NS				
<i>Porina</i>	<i>byssophila</i>		VU	D2	DD	NR		S	80	
<i>Porina</i>	<i>chlorotica</i> f. <i>chlorotica</i>		LC		LC					
<i>Porina</i>	<i>coralloidea</i>		NT		LC	NS	IR			
<i>Porina</i>	<i>curnowii</i>		VU	D2	NT	NR		N		
<i>Porina</i>	<i>effilata</i>		EN	D	CR	NR				P*
<i>Porina</i>	<i>grandis</i>		VU	D2	DD	NR		S	20	
<i>Porina</i>	<i>guentheri</i> var. <i>guentheri</i>		LC		LC	NS				
<i>Porina</i>	<i>guentheri</i> var. <i>lucens</i>		LC		LC	NS			58	
<i>Porina</i>	<i>hibernica</i>		VU	D2	NT	NS	IR			P*
<i>Porina</i>	<i>interjungens</i>		NT		NT	NS				
<i>Porina</i>	<i>lectissima</i>		LC		LC					
<i>Porina</i>	<i>leptalea</i>		LC		LC					
<i>Porina</i>	<i>linearis</i>		LC		LC					
<i>Porina</i>	<i>rosei</i>		NT		NT	NS	IR		21	X
<i>Porocyphus</i>	<i>coccodes</i>		LC		LC	NS			26	
<i>Porocyphus</i>	<i>kenmorensis</i>		NT		NT	NS			38	
<i>Porocyphus</i>	<i>leptogiella</i>		NT		NT	NR		S	27	
<i>Porpidia</i>	<i>cinereoatra</i>		LC		LC					
<i>Porpidia</i>	<i>contraponenda</i>		LC		LC	NS				
<i>Porpidia</i>	<i>crustulata</i>		LC		LC					

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	National/international responsibility	Rarity	Edge of British range in Wales	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Porpidia</i>	<i>flavocruenta</i>	DD			LC	NS				
<i>Porpidia</i>	<i>hydrophila</i>				LC					
<i>Porpidia</i>	<i>macrocarpa</i> f. <i>macrocarpa</i>				LC					
<i>Porpidia</i>	<i>melinodes</i>				LC	NS	S	28		
<i>Porpidia</i>	<i>ochrolemma</i>	DD			DD	NR		100		
<i>Porpidia</i>	<i>pachythallina</i>	DD			DD	NR				
<i>Porpidia</i>	<i>platycarpoides</i>				LC					
<i>Porpidia</i>	<i>rugosa</i>				LC					
<i>Porpidia</i>	<i>soredizodes</i>				LC					
<i>Porpidia</i>	<i>speirea</i>				LC					
<i>Porpidia</i>	<i>striata</i>				LC	NS				
<i>Porpidia</i>	<i>superba</i> f. <i>superba</i>	NT?			LC	NS	S			
<i>Porpidia</i>	<i>superba</i> f. <i>sorediata</i>	NT?			NE	NR	S			
<i>Porpidia</i>	<i>tuberculosa</i>				LC					
<i>Protoblastenia</i>	<i>calva</i>				LC					
<i>Protoblastenia</i>	<i>cyclospora</i>	VU	D2		DD	NR				
<i>Protoblastenia</i>	<i>incrustans</i>				LC					
<i>Protoblastenia</i>	<i>lilacina</i>	DD			DD	NR				
<i>Protoblastenia</i>	<i>rupestris</i>				LC					
<i>Protoblastenia</i>	<i>siebenhaariana</i>	VU	D2		LC	NS	S			
<i>Protopannaria</i>	<i>pezizoides</i>				LC					
<i>Protoparmelia</i>	<i>atriseda</i>	NT			VU	NR	S	83		
<i>Protoparmelia</i>	<i>badia</i>				LC					
<i>Protoparmelia</i>	<i>memnonia</i>	DD			NT	NR				
<i>Protoparmelia</i>	<i>montagnei</i>	VU	D2		LC	NS	N			
<i>Protothelenella</i>	<i>corrosa</i>	NT			LC	NS	S			
<i>Protothelenella</i>	<i>sphinctrinoidella</i>	VU	D2		LC	NS	S			
<i>Protothelenella</i>	<i>sphinctrinoides</i>	VU	D2		NT	NR	S			
<i>Pseudophebe</i>	<i>pubescens</i>				LC					
<i>Pseudevernia</i>	<i>furfuracea</i> var. <i>ceratea</i>				LC					
<i>Pseudevernia</i>	<i>furfuracea</i> var. <i>furfuracea</i>				LC					
<i>Pseudocyphellaria</i>	<i>intricata</i>	CR	D		NT	NS	IR	S		P*
<i>Pseudocyphellaria</i>	<i>lacerata</i>	CR	D		VU	NR	IR	S	25	P* S8
<i>Pseudocyphellaria</i>	<i>norvegica</i>	CR	D		LC	NS	IR	S		P*
<i>Psilolechia</i>	<i>clavulifera</i>				LC	NS				
<i>Psilolechia</i>	<i>leprosa</i>				LC					
<i>Psilolechia</i>	<i>lucida</i>				LC					
<i>Psora</i>	<i>decipiens</i>	NT			LC	NS				
<i>Psoroglaena</i>	<i>stigonemoides</i>				LC					
<i>Psoroma</i>	<i>hypnorum</i>	VU	D2		LC	NS				
<i>Psorotichia</i>	<i>schaereri</i>	NT			LC	NS				
<i>Pterygiopsis</i>	<i>concordatula</i>	VU	D2		NT	NS				
<i>Pterygiopsis</i>	<i>lacustris</i>	VU	D2		NT	NR		44		
<i>Ptychographa</i>	<i>xylographoides</i>	NT			NT	NS	IR			
<i>Punctelia</i>	<i>borreri</i>				LC					
<i>Punctelia</i>	<i>jeckeri</i>				LC					
<i>Punctelia</i>	<i>reddenda</i>	NT			LC					
<i>Punctelia</i>	<i>subrudecta</i>				LC					
<i>Pycnothelia</i>	<i>papillaria</i>	NT			LC					
<i>Pyrenopsis</i>	<i>grumulifera</i>	DD			DD	NR	S			
<i>Pyrenopsis</i>	<i>impolita</i>	DD			DD	NR	S	60		

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<i>Pyrenopsis</i>	<i>subareolata</i>	LC		LC	NS		S	32	
<i>Pyrenula</i>	<i>chlorospila</i>	LC		LC					
<i>Pyrenula</i>	<i>coryli</i> [F]	RE		VU	NR				
<i>Pyrenula</i>	<i>hibernica</i>	CR	D	VU	NR	IR	S		P*
<i>Pyrenula</i>	<i>laevigata</i>	VU	D2	LC	NS	IR			S8
<i>Pyrenula</i>	<i>macrospora</i>	LC		LC					
<i>Pyrenula</i>	<i>occidentalis</i>	VU	D2	LC		IR			
<i>Pyrrhospora</i>	<i>querna</i>	LC		LC					
<i>Racodium</i>	<i>rupestris</i>	LC		LC					
<i>Ramalina</i>	<i>calicaris</i>	LC		LC					
<i>Ramalina</i>	<i>canariensis</i>	LC		LC					
<i>Ramalina</i>	<i>cuspidata</i>	LC		LC					
<i>Ramalina</i>	<i>farinacea</i>	LC		LC					
<i>Ramalina</i>	<i>fastigiata</i>	LC		LC					
<i>Ramalina</i>	<i>fraxinea</i>	LC		LC		IR			
<i>Ramalina</i>	<i>lacera</i>	DD		LC					
<i>Ramalina</i>	<i>pollinaria</i>	LC		LC	NS				
<i>Ramalina</i>	<i>polymorpha</i>	NT		NT	NS		S	50	
<i>Ramalina</i>	<i>portuensis</i>	DD		LC	NS	IR		27	
<i>Ramalina</i>	<i>siliquosa</i>	LC		LC					
<i>Ramalina</i>	<i>subfarinacea</i>	LC		LC					
<i>Ramonia</i>	<i>chrysophaea</i>	NT		NT	NS	IR			P*
<i>Ramonia</i>	<i>dictyospora</i>	VU	D2	NT	NR	E			P*
<i>Rhaphidicyrtis</i>	<i>trichosporella</i>	NT		LC	NS				
<i>Rhizocarpon</i>	<i>alpicola</i>	LC		LC	NS		S		
<i>Rhizocarpon</i>	<i>amphibium</i>	DD		DD	NR		S	20	
<i>Rhizocarpon</i>	<i>anaperum</i>	VU	D2	LC	NR			50	
<i>Rhizocarpon</i>	<i>badioatrum</i>	VU	D2	LC	NS			27	
<i>Rhizocarpon</i>	<i>caeruleoalbum</i>	DD		DD	NR		S	33	
<i>Rhizocarpon</i>	<i>caesium</i>	DD		DD	NR		S		
<i>Rhizocarpon</i>	<i>cinereovirens</i>	NT		DD	NR		S	55	
<i>Rhizocarpon</i>	<i>distinctum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>eupetraeoides</i>	VU	D2	DD	NR			25	
<i>Rhizocarpon</i>	<i>furfurosum</i>	NT		NT	NS			56	
<i>Rhizocarpon</i>	<i>geminatum</i>	DD		DD	NS		S		
<i>Rhizocarpon</i>	<i>geographicum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>hochstetteri</i>	LC		LC					
<i>Rhizocarpon</i>	<i>infernum</i> f. <i>infernum</i>	LC		DD	NR			39	
<i>Rhizocarpon</i>	<i>infernum</i> f. <i>sylvaticum</i>	LC		LC	NS				
<i>Rhizocarpon</i>	<i>intermediellum</i>	VU	D2	DD	NR		S	33	
<i>Rhizocarpon</i>	<i>lavatum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>lecanorinum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>oederi</i>	LC		LC					
<i>Rhizocarpon</i>	<i>petraeum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>polycarpum</i>	LC		LC	NS				
<i>Rhizocarpon</i>	<i>reductum</i>	LC		LC					
<i>Rhizocarpon</i>	<i>richardii</i>	LC		LC					
<i>Rhizocarpon</i>	<i>simillimum</i>	DD		DD	NR			20	
<i>Rhizocarpon</i>	<i>subgeminatum</i>	LC		LC	NS				
<i>Rhizocarpon</i>	<i>submodestum</i>	DD		DD	NR		S	50	
<i>Rhizocarpon</i>	<i>superficiale</i>	VU	D2	DD	NR		S	33	

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Rhizocarpon</i>	<i>timdalii</i>			DD	DD	NR		100	
<i>Rhizocarpon</i>	<i>umbilicatum</i>			LC	LC				
<i>Rhizocarpon</i>	<i>viridiatrum</i>			LC	LC	NS			
<i>Rimularia</i>	<i>badioatra</i>			LC	LC	NS			
<i>Rimularia</i>	<i>furvella</i>			LC	LC				
<i>Rimularia</i>	<i>gyrizans</i>			NT	LC	NS			
<i>Rimularia</i>	<i>insularis</i>			LC	LC	NS		39	
<i>Rimularia</i>	<i>intercedens</i>			LC	LC	NS		28	
<i>Rimularia</i>	<i>limborina</i>			LC	LC	NS			
<i>Rinodina</i>	<i>aspersa</i>			NT	NT	NR		20	
<i>Rinodina</i>	<i>atrocinerea</i>			LC	LC				
<i>Rinodina</i>	<i>biloculata</i>		D2	VU	DD	NR	N		
<i>Rinodina</i>	<i>bischoffii</i>			LC	LC	NS			
<i>Rinodina</i>	<i>confragosa</i>			LC	LC	NS			
<i>Rinodina</i>	<i>conradii</i>			LC	LC	NS		50	
<i>Rinodina</i>	<i>efflorescens</i>			LC	LC	NS			
<i>Rinodina</i>	<i>fimbriata</i>		D2	VU	LC	NS			
<i>Rinodina</i>	<i>flavosoralifera</i>			NT	NT	NR		22	
<i>Rinodina</i>	<i>gennarii</i>			LC	LC				
<i>Rinodina</i>	<i>griseosoralifera</i>			LC	LC	NS			
<i>Rinodina</i>	<i>immersa</i>			DD	DD	NR		60	
<i>Rinodina</i>	<i>insularis</i>			DD	DD	NS			
<i>Rinodina</i>	<i>interpolata</i>			NT	NT	NR			
<i>Rinodina</i>	<i>isidioides</i>			NT	NT	NS	IR	36	P*
<i>Rinodina</i>	<i>luridescens</i>			LC	LC				
<i>Rinodina</i>	<i>milvina</i>		D1	VU	NT	NR	S	33	
<i>Rinodina</i>	<i>occulta</i>			NT	DD	NR		33	
<i>Rinodina</i>	<i>oleae</i>			LC	LC				
<i>Rinodina</i>	<i>oxydata</i>			LC	LC	NS			
<i>Rinodina</i>	<i>roboris</i> var. <i>armericola</i>			NT	NT	NR		33	
<i>Rinodina</i>	<i>roboris</i> var. <i>roboris</i>			LC	LC		IR		
<i>Rinodina</i>	<i>sicula</i>			LC	LC	NS		29	
<i>Rinodina</i>	<i>sophodes</i>			LC	LC				
<i>Rinodina</i>	<i>teichophila</i>			LC	LC				
<i>Roccella</i>	<i>fuciformis</i>			NT	NT	NS	N		
<i>Roccella</i>	<i>phycopsis</i>			NT	NT	NS	N		
<i>Romularia</i>	<i>lurida</i>			LC	LC				
<i>Ropalospora</i>	<i>lugubris</i> f. <i>lugubris</i>		D2	VU	LC	NR	S		
<i>Ropalospora</i>	<i>viridis</i>			LC	LC	NS			
<i>Sarcogyne</i>	<i>clavus</i>			DD	NT	NS			
<i>Sarcogyne</i>	<i>privigna</i>			LC	LC	NS			
<i>Sarcogyne</i>	<i>regularis</i>			LC	LC				
<i>Sarcopyrenia</i>	<i>gibba</i> var. <i>geisleri</i> [?LF]			LC	LC				
<i>Sarcosagium</i>	<i>campestre</i> var. <i>campestre</i>			LC	LC	NS			
<i>Sarcosagium</i>	<i>campestre</i> var. <i>macrosporum</i>			NT	NE	?		41	
<i>Schaereria</i>	<i>cinereorufa</i>			LC	LC				
<i>Schaereria</i>	<i>corticola</i>		D1	CR	DD	NR	S	50	
<i>Schaereria</i>	<i>fuscocinerea</i> var. <i>fuscocinerea</i>			LC	LC				
<i>Schismatomma</i>	<i>cretaceum</i>			VU	D1	LC	IR		
<i>Schismatomma</i>	<i>decolorans</i>			LC	LC				
<i>Schismatomma</i>	<i>graphidioides</i>			VU	D1	VU	NS	IR	P*

Taxon		Wales Red List threat status	Criteria	British Red List threat status	National/international rarity	Edge of British responsibility	BAP species (P) / Section 42 species (*)	Proportion of British population	Schedule 8 species
<i>Schismatomma</i>	<i>niveum</i>	VU		D1	LC		IR		
<i>Schismatomma</i>	<i>quercicola</i>	NT			LC		E		
<i>Schismatomma</i>	<i>umbrinum</i>	LC			LC	NS	IR	21	
<i>Scoliciosporum</i>	<i>chlorococcum</i>	LC			LC				
<i>Scoliciosporum</i>	<i>curvatum</i>	LC			LC	NS		43	
<i>Scoliciosporum</i>	<i>intrusum</i>	DD			LC	NR			
<i>Scoliciosporum</i>	<i>pruinatum</i>	LC			LC				
<i>Scoliciosporum</i>	<i>umbrinum</i>	LC			LC				
<i>Solenopsora</i>	<i>candicans</i>	LC			LC				
<i>Solenopsora</i>	<i>holophaea</i>	LC			LC	NS			
<i>Solenopsora</i>	<i>vulturiensis</i>	LC			LC				
<i>Solorina</i>	<i>saccata</i>	LC			LC				
<i>Solorina</i>	<i>spongiosa</i>	NT			LC	NS			
<i>Sphaerophorus</i>	<i>fragilis</i>	LC			LC				
<i>Sphaerophorus</i>	<i>globosus</i>	LC			LC				
<i>Spilonema</i>	<i>paradoxum</i>	DD			NT	NR			
<i>Sporastatia</i>	<i>polyspora</i>	EN	D		NT	NR			
<i>Sporastatia</i>	<i>testudinea</i>	EN	D		NT	NR			
<i>Squamarina</i>	<i>cartilaginea</i> var. <i>cartilaginea</i>	LC			LC				
<i>Staurothele</i>	<i>caesia</i>	LC			LC	NS			
<i>Staurothele</i>	<i>fissa</i>	LC			LC				
<i>Staurothele</i>	<i>guestphalica</i>	DD			DD	NR		20	
<i>Staurothele</i>	<i>hymenogonia</i>	VU	D2		LC	NS			
<i>Staurothele</i>	<i>rufa</i>	EN	D		EN	NR		100	
<i>Staurothele</i>	<i>rugulosa</i>	VU	D2		NT	NR			
<i>Staurothele</i>	<i>rupifraga</i>	LC			LC	NS			
<i>Staurothele</i>	<i>succedens</i>	LC			LC	NS			
<i>Steinia</i>	<i>geophana</i>	LC			LC	NS		34	
<i>Stenocybe</i>	<i>nitida</i>	DD			LC	NS	S?		
<i>Stenocybe</i>	<i>pullatula</i> [F]	LC			LC				
<i>Stenocybe</i>	<i>septata</i> [F]	LC			LC		IR		
<i>Stereocaulon</i>	<i>condensatum</i>	NT			LC	NS		27	
<i>Stereocaulon</i>	<i>dactylophyllum</i> var. <i>dactylophyllum</i>	LC			LC				
<i>Stereocaulon</i>	<i>delisei</i>	VU	B2a, biii		NT	NS	IR	21	*
<i>Stereocaulon</i>	<i>evolutum</i>	LC			LC				
<i>Stereocaulon</i>	<i>glareosum</i>	VU	B2a, biii		NT	NR	S	50	
<i>Stereocaulon</i>	<i>leucophaeopsis</i>	NT			LC	NS			
<i>Stereocaulon</i>	<i>nanodes</i>	LC			LC	NS			
<i>Stereocaulon</i>	<i>pileatum</i>	LC			LC				
<i>Stereocaulon</i>	<i>plicatile</i>	VU	B2a, biii		NT	NR	IR		
<i>Stereocaulon</i>	<i>symphycheilum</i>	VU	D1		EN	NR		25	p*
<i>Stereocaulon</i>	<i>tornense</i>	VU	D1		NT	NS	S		
<i>Stereocaulon</i>	<i>vesuvianum</i> var. <i>nodulosum</i>	LC			LC	NS			
<i>Stereocaulon</i>	<i>vesuvianum</i> var. <i>symphycheileoides</i>	DD			NE	NS			
<i>Stereocaulon</i>	<i>vesuvianum</i> var. <i>vesuvianum</i>	LC			LC				
<i>Sticta</i>	<i>canariensis</i> / <i>dufourii</i>	VU			LC		IR		
<i>Sticta</i>	<i>canariensis</i> independ. green morph.	EN	D		VU	NR	IR		p*
<i>Sticta</i>	<i>fuliginosa</i>	VU			LC		IR		
<i>Sticta</i>	<i>limbata</i>	NT			LC		IR		
<i>Sticta</i>	<i>sylvatica</i>	NT			LC		IR		
<i>Strangospora</i>	<i>microhaema</i>	CR	D		NT	NS	IR	S	*

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status		National/international responsibility		BAP species (P) / Section 42 species (*)		Schedule 8 species	
		Criteria	British Red List threat status	Rarity	Edge of British range in Wales	Proportion of British population			
<i>Strangospora</i>	<i>moriformis</i>	LC		LC	NS				
<i>Strangospora</i>	<i>pinicola</i>	LC		LC	NS				
<i>Strigula</i>	<i>confusa</i>	DD		DD	NR				
<i>Strigula</i>	<i>jamesii</i>	VU	D2	LC	NS				
<i>Strigula</i>	<i>phaea</i>	VU	D2	LC	NS				
<i>Strigula</i>	<i>stigmatella</i> var. <i>alpestris</i>	VU	D2	LC	NS		S		
<i>Strigula</i>	<i>stigmatella</i> var. <i>stigmatella</i>	CR	D	EN	NR			33	P*
<i>Strigula</i>	<i>taylorii</i>	LC		LC	NS	IR			
<i>Strigula</i>	<i>thelopsidoides</i>	CR	D	NT	NR		S		
<i>Synalissa</i>	<i>ramulosa</i>	VU	D2	VU	NR			30	P*
<i>Syncesia</i>	<i>myrticola</i>	VU	D2	NT	NS	IR	N		
<i>Teloschistes</i>	<i>flavicans</i>	VU	A1	VU	NS		N	23	P*
<i>Tephromela</i>	<i>atra</i>	LC		LC					
<i>Tephromela</i>	<i>grumosa</i>	LC		LC					
<i>Tephromela</i>	<i>pertusarioides</i>	DD		DD	NR		S	63	
<i>Thamnolia</i>	<i>vermicularis</i> ssp. <i>subuliformis</i>	VU	D2	LC			S		
<i>Thelenella</i>	<i>muscorum</i> var. <i>muscorum</i>	LC		LC					
<i>Thelenella</i>	<i>muscorum</i> var. <i>octospora</i>	VU	D2	NE	NR				
<i>Thelidium</i>	<i>decipiens</i>	LC		LC					
<i>Thelidium</i>	<i>fontigenum</i>	VU	D2	LC	NR				
<i>Thelidium</i>	<i>impressum</i>	VU	D2	LC	NS			20	
<i>Thelidium</i>	<i>incavatum</i>	LC		LC					
<i>Thelidium</i>	<i>minutulum</i>	LC		LC					
<i>Thelidium</i>	<i>papulare</i> f. <i>papulare</i>	LC		LC					
<i>Thelidium</i>	<i>papulare</i> f. <i>sorediatum</i>	VU	D2	LC	NR		S		
<i>Thelidium</i>	<i>pluvium</i>	NT		LC	NS		S	32	
<i>Thelidium</i>	<i>pyrenophorum</i>	LC		LC	NS				
<i>Thelidium</i>	<i>zwackhii</i>	LC		LC	NS				
<i>Thelocarpon</i>	<i>epibolum</i> var. <i>epibolum</i>	LC		LC	NS				
<i>Thelocarpon</i>	<i>impressellum</i>	LC		NE	NS		S	50	
<i>Thelocarpon</i>	<i>intermediellum</i>	RE		LC	NR				
<i>Thelocarpon</i>	<i>laureri</i>	LC		LC	NS				
<i>Thelocarpon</i>	<i>magnussonii</i>	NT		DD	NR	E			
<i>Thelocarpon</i>	<i>olivaceum</i>	DD		NE	NR		?	?	
<i>Thelocarpon</i>	<i>opertum</i>	DD		NT	NR	E		33	
<i>Thelocarpon</i>	<i>pallidum</i>	DD		DD	NR			29	
<i>Thelocarpon</i>	<i>robustum</i>	DD		LC	NR			50	
<i>Thelocarpon</i>	<i>saxicola</i>	DD		LC	NR			100	
<i>Thelocarpon</i>	<i>superellum</i>	DD		LC	NR			33	
<i>Thelopsis</i>	<i>melathelia</i>	VU	D2	NT	NR		S		
<i>Thelopsis</i>	<i>rubella</i>	NT		LC					
<i>Thelotrema</i>	<i>lepadinum</i>	NT		LC					
<i>Thermutis</i>	<i>velutina</i>	VU	D2	NT	NR			20	
<i>Thrombium</i>	<i>epigaeum</i>	LC		LC	NS			41	
<i>Tomasellia</i>	<i>diffusa</i> [F]	RE?		LC	NR		S		
<i>Tomasellia</i>	<i>gelatinosa</i> [F]	LC		LC					
<i>Toninia</i>	<i>aromatica</i>	LC		LC					
<i>Toninia</i>	<i>diffracta</i>	DD		DD	NR				
<i>Toninia</i>	<i>fusispora</i>	VU	D2	LC	NR		S		
<i>Toninia</i>	<i>mesoidea</i>	LC		LC	NS				
<i>Toninia</i>	<i>sedifolia</i>	LC		LC					P*

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Toninia</i>	<i>thiopsora</i>	LC		LC	NS			44	
<i>Toninia</i>	<i>verrucarioides</i>	LC		LC	NS				
<i>Trapelia</i>	<i>coarctata</i>	LC		LC					
<i>Trapelia</i>	<i>corticola</i>	LC		LC					
<i>Trapelia</i>	<i>glebulosa</i>	LC		LC					
<i>Trapelia</i>	<i>obtegens</i>	LC		LC					
<i>Trapelia</i>	<i>placodioides</i>	LC		LC					
<i>Trapeliopsis</i>	<i>aeneofusca</i>	DD		DD	NR			100	
<i>Trapeliopsis</i>	<i>flexuosa</i>	LC		LC					
<i>Trapeliopsis</i>	<i>gelatinosa</i>	LC		LC					
<i>Trapeliopsis</i>	<i>glaucolepidea</i>	LC		LC	NS				
<i>Trapeliopsis</i>	<i>granulosa</i>	LC		LC					
<i>Trapeliopsis</i>	<i>percrenata</i>	DD		LC	NS				
<i>Trapeliopsis</i>	<i>pseudogranulosa</i>	LC		LC					
<i>Trapeliopsis</i>	<i>wallrothii</i>	LC		LC					
<i>Tremolecia</i>	<i>atrata</i>	LC		LC					
<i>Tuckermanopsis</i>	<i>chlorophylla</i>	NT		LC					
<i>Tylothallia</i>	<i>biformigera</i>	LC		LC					
<i>Umbilicaria</i>	<i>cylindrica</i>	LC		LC					
<i>Umbilicaria</i>	<i>deusta</i>	LC		LC	NS				
<i>Umbilicaria</i>	<i>hirsuta</i>	NT		NT	NR		S	40	
<i>Umbilicaria</i>	<i>polyphylla</i>	LC		LC					
<i>Umbilicaria</i>	<i>polyrrhiza</i>	LC		LC					
<i>Umbilicaria</i>	<i>proboscidea</i>	NT		LC			S		
<i>Umbilicaria</i>	<i>torrefacta</i>	LC		LC					
<i>Usnea</i>	<i>articulata</i>	VU	A1	NT		IR			P*
<i>Usnea</i>	<i>ceratina</i>	LC		LC					
<i>Usnea</i>	<i>cornuta</i>	LC		LC					
<i>Usnea</i>	<i>esperantiana</i>	DD		NT	NR	IR			
<i>Usnea</i>	<i>filipendula</i>	LC		LC					
<i>Usnea</i>	<i>flammea</i>	LC		LC					
<i>Usnea</i>	<i>flavocardia</i>	DD		DD	NR				
<i>Usnea</i>	<i>florida</i>	LC		NT					*
<i>Usnea</i>	<i>fragilescens</i> var. <i>mollis</i>	LC		LC					
<i>Usnea</i>	<i>glabrata</i>	DD		DD	NR	IR		33	
<i>Usnea</i>	<i>glabrescens</i>	LC		LC	NS				
<i>Usnea</i>	<i>hirta</i>	LC		LC					
<i>Usnea</i>	<i>rubicunda</i>	LC		LC					
<i>Usnea</i>	<i>subfloridana</i>	LC		LC					
<i>Usnea</i>	<i>wasmuthii</i>	LC		LC	NS				
<i>Vahliella</i>	<i>atlantica</i>	DD		DD	NR				
<i>Vahliella</i>	<i>leucophaea</i>	NT		LC					
<i>Verrucaria</i>	<i>aethiobola</i>	LC		LC					
<i>Verrucaria</i>	<i>amphibia</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>anziana</i>	LC		NE	NS				
<i>Verrucaria</i>	<i>aquatilis</i>	LC		LC					
<i>Verrucaria</i>	<i>baldensis</i>	LC		LC					
<i>Verrucaria</i>	<i>bryoctona</i>	LC		LC	NS			40	
<i>Verrucaria</i>	<i>bulgarica</i>	LC		LC	NR			67	
<i>Verrucaria</i>	<i>caerulea</i>	LC		LC					
<i>Verrucaria</i>	<i>calciseda</i>	LC		LC	NR			30	

A Lichen Red Data List for Wales

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Verrucaria</i>	<i>cinereoatrata</i>	DD		NE	NS				
<i>Verrucaria</i>	<i>denudata</i>	LC		LC					
<i>Verrucaria</i>	<i>ditmarsica</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>dolosa</i>	LC		LC					
<i>Verrucaria</i>	<i>dufourii</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>elaeina</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>funkii</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>fuscella</i>	LC		LC					
<i>Verrucaria</i>	<i>fusconigrescens</i>	LC		LC					
<i>Verrucaria</i>	<i>halizoa</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>hochstetteri</i>	LC		LC					
<i>Verrucaria</i>	<i>internigrescens</i>	LC		LC	NS			43	
<i>Verrucaria</i>	<i>latebrosa</i>	LC		LC	NR				
<i>Verrucaria</i>	<i>latericola</i>	DD		DD	NR			40	
<i>Verrucaria</i>	<i>macrostoma</i>	LC		LC					
<i>Verrucaria</i>	<i>macrostoma</i> f. <i>furfuracea</i>	LC		LC					
<i>Verrucaria</i>	<i>madida</i>	DD		DD	NR			50	
<i>Verrucaria</i>	<i>margacea</i>	LC		LC					
<i>Verrucaria</i>	<i>maura</i>	LC		LC					
<i>Verrucaria</i>	<i>mucosa</i>	LC		LC					
<i>Verrucaria</i>	<i>muralis</i>	LC		LC					
<i>Verrucaria</i>	<i>murina</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>nigrescens</i>	LC		LC					
<i>Verrucaria</i>	<i>pachyderma</i>	DD		DD	NR	S		82	
<i>Verrucaria</i>	<i>pinguicula</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>polysticta</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>praetermissa</i>	LC		LC					
<i>Verrucaria</i>	<i>prominula</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>rheitrophila</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>rosula</i> Orange ad int.	LC		NE	NR?				
<i>Verrucaria</i>	<i>sandstedei</i>	DD		DD	NR				
<i>Verrucaria</i>	<i>scabra</i>	LC		LC	NR?				
<i>Verrucaria</i>	<i>simplex</i>	LC		LC	NS				
<i>Verrucaria</i>	<i>striatula</i>	LC		LC					
<i>Verrucaria</i>	<i>viridula</i>	LC		LC					
<i>Vestergrenopsis</i>	<i>elaeina</i>	CR	B1a	VU	NR	S			
<i>Veizdaea</i>	<i>acicularis</i>	NT		LC	NS	S		71	
<i>Veizdaea</i>	<i>aestivalis</i>	LC		LC					
<i>Veizdaea</i>	<i>cobria</i>	LC		LC	NR			80	
<i>Veizdaea</i>	<i>leprosa</i>	LC		LC					
<i>Veizdaea</i>	<i>retigera</i>	LC		LC	NS				
<i>Veizdaea</i>	<i>rheocarpa</i>	LC		LC	NS			65	
<i>Wadeana</i>	<i>dendrographa</i>	VU	D2	NT	NS	IR			p*
<i>Wadeana</i>	<i>minuta</i>	DD		NT	NS	IR			
<i>Xanthoparmelia</i>	<i>conspersa</i>	LC		LC					
<i>Xanthoparmelia</i>	<i>delisei</i>	LC		LC	NS				
<i>Xanthoparmelia</i>	<i>loxodes</i>	LC		LC					
<i>Xanthoparmelia</i>	<i>mougeotii</i>	LC		LC					
<i>Xanthoparmelia</i>	<i>pulla</i>	LC		LC					
<i>Xanthoparmelia</i>	<i>tinctina</i>	EN	B1a	VU	NR			25	
<i>Xanthoparmelia</i>	<i>verruculifera</i>	LC		LC					

Taxon		Wales Red List threat status	Criteria	British Red List threat status	Rarity	Edge of British responsibility	Proportion of British population	BAP species (P) / Section 42 species (*)	Schedule 8 species
<i>Xanthoria</i>	<i>aureola</i>	LC		LC					
<i>Xanthoria</i>	<i>calcicola</i>	LC		LC					
<i>Xanthoria</i>	<i>candelaria</i>	LC		LC					
<i>Xanthoria</i>	<i>elegans</i>	LC		LC					
<i>Xanthoria</i>	<i>parietina</i>	LC		LC					
<i>Xanthoria</i>	<i>polycarpa</i>	LC		LC					
<i>Xerotrema</i>	<i>quercicola</i>	LC		LC	?E			40	
<i>Xylographa</i>	<i>parallela</i>	VU	D2	LC			S		
<i>Xylographa</i>	<i>vitiligo</i>	LC		LC					

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Appendix 1

The Lobarion and mine site communities

Arising from Section 42 of the Natural Environment and Rural Communities Act 2006, the Welsh Assembly Government has approved a list of species and habitats in Wales the conservation of which it considers to be of principal importance. Contained within the list of species of lichens are two lichen-rich communities viz the “Lobarion” and “mine site community”.

Lobarion

The following provides some guidance on the identification of the Lobarion. (For fuller details see James, P.W., Hawksworth, D.L. & Rose, F. (1977). Lichen Communities in the British Isles pgs 322-327 in *Lichen Ecology*, Seaward, MRD (Ed.), Academic Press, London). When well-developed this is a spectacular community that can include some of the largest foliose lichens. Unfortunately most of its constituent species are highly sensitive to sulphur dioxide, acid rain and excessive ammonia levels and many examples of the Lobarion in Wales are now species poor.

The Lobarion is likely to be present on a tree or shrub or any rock face that supports the following:-

Any species of the genus

<i>Degelia</i>	<i>Parmeliella</i> (except <i>P. parvula</i> -see below)
<i>Fuscopannaria</i>	<i>Pannaria</i>
<i>Lobaria</i>	<i>Pseudocyphellaria</i>
<i>Nephroma</i>	<i>Sticta</i>

Any of the following species

<i>Agonimia octospora</i>	<i>Pachyphiale carneola</i>
<i>Collema fasciculare*</i>	<i>Parmotrema crinitum</i>
<i>Collema furfuraceum</i>	<i>Peltigera collina</i>
<i>Gyalecta flotowii*</i>	<i>Phyllopsora rosei</i>
<i>Gomphillus calycioides*</i>	<i>Porina coralloidea</i>
<i>Leptogium burgessii</i>	<i>Porina hibernica*</i>
<i>Leptogium brebissonii*</i>	<i>Punctelia reddenda</i>
<i>Leptogium cochleatum*</i>	<i>Thelopsis rubella</i>

(* = species individually listed on Section 42 of the Natural Environment and Communities Act (2006) as being of principal importance in Wales)

Any three of the following species

<i>Acrocordia gemmata</i>	<i>Mycobilimbia pilularis</i>
<i>Arthonia vinosa</i>	<i>Normandina pulchella</i>
<i>Catinaria atropurpurea</i>	<i>Opegrapha soreidiiifera</i>
<i>Dimerella lutea</i>	<i>Parmeliella parvula</i>
<i>Leptogium lichenoides</i>	<i>Peltigera horizontalis</i>
<i>Leptogium teretiusculum</i>	<i>Pertusaria hemisphaerica</i>
	<i>Thelotrema lepadinum</i>

Metallophytes

Once Wales probably supported a significant assemblage of lichens associated with natural outcrops of heavy metal-rich rock. Due to the destruction of these outcrops by our mining activities the survival of metallophyte lichens is now almost entirely dependent on the conservation of old metal mine sites.

Two special types of lichen are almost completely confined to these sites in Wales:-

1. Those lichens that appear to in some way require heavy metals and only occur on heavy metal-rich substrates-the obligate metallophytes.
2. Those lichens that tolerate heavy metals but elsewhere can be found in sites without such metals. Most of these species are probably poor competitors but can survive extreme conditions. In Wales they are mostly confined to metal-rich sites but elsewhere occur, for example, on exposed peat on the summit ridges of high mountains-the facultative metallophytes.

The following species fall into one or other of these categories in Wales and any threatened site supporting more than 3 of these species should be subject to a detailed assessment.

<i>Acarospora sinopica</i>	<i>Rhizocarpon cinereovirens</i>
<i>Baeomyces placophyllus</i>	<i>R. furfurosum</i>
<i>Belonia incarnata</i>	<i>R. oederi</i>
<i>Epilichen scabrosa</i>	<i>Sarcosagium campestre</i>
<i>Gyalidea subscutellaris</i>	<i>Steinia geophana</i>
<i>Gyalideopsis crenulata</i>	<i>Stereocaulon condensatum</i>
<i>Lecanora epanora</i>	<i>S. dactylophyllum</i>
<i>L. gisleriana</i>	<i>S. delisei*</i>
<i>L. handelii</i>	<i>S. glareosum</i>
<i>L. subaurea</i>	<i>S. leucophaeopsis</i>
<i>Placopsis lambii</i>	<i>S. nanodes</i>
<i>Placynthiella hyporhoda</i>	<i>S. pileatum</i>
<i>Polyblastia agraria</i>	<i>S. symphycheilium*</i>
<i>Psilolechia leprosa</i>	<i>Vezdaea</i> spp.

(* = species individually listed on Section 42 of the Natural Environment and Communities Act (2006) as being of principal importance in Wales)

Featured species

These two species have been selected to illustrate the value of producing a Lichen Red List for Wales.

Pitted Lungwort (*Lobaria scrobiculata*) **Least Concern** in Great Britain but **Critically Endangered** in Wales

This large and distinctive foliose lichen of tree trunks and branches was once probably widespread in Wales.

Sensitive to sulphur dioxide pollution and other atmospheric pollutants it is the least abundant of the four lungwort species. It is now confined to a scatter of ancient trees and the trunks and branches of a very few younger trees in ravine sites in northwest Wales where it is sheltered from major sources of atmospheric pollutants. There have been no reports of fertile material recently and all known populations, if they are currently reproducing, must do so vegetatively.

A significant contraction in its range has recently occurred with the loss of populations in Montgomeryshire, Pembrokeshire and mid Cardiganshire.



Ciliate Strap-lichen (*Heterodermia leucomela*) **Endangered** in Great Britain but **Vulnerable** in Wales

A lichen widespread in the tropics, it reaches the northernmost edge of its world range on Anglesey. In Wales it is found scrambling amongst the low growth of wind-pruned vegetation on almost frost-free sea cliffs, whilst in the tropics it grows on twigs in the forest canopy. It has recently been discovered in two new sites in Pembrokeshire to add to its former known range of Bardsey, The Llyn and Anglesey. All its known sites are sympathetically managed.



Cover image
Tree lungwort (*Lobaria pulmonaria*)

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